Cassette auto radio DC 418

DC 318

Service
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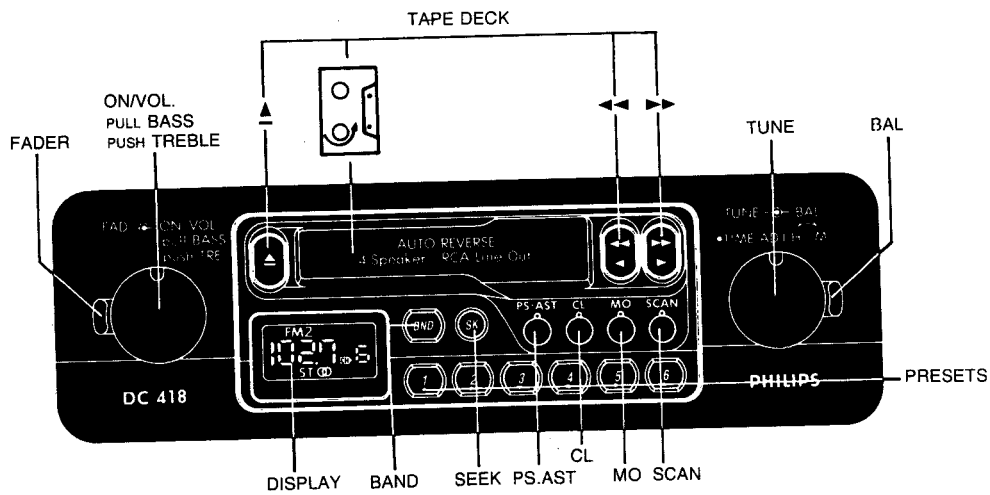
ServiceManual

12V ⊖⊣|||•



Service Documentation Subject Modification

PHILIPS

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■ SPECIFICATIONS

General Section

Power supply:	14.4 Volts
Ground polarity:	Negative (−)

FM Section

	Description		Unit	Norminal	Limit
1.	Frequency range		MHz	87.9 − 107.9	87.9 ± 0.3 107.9 ± 0.3
2.	Intermediate frequency		MHz	10.7	10.7 ± 0.3
3.	Sensitivity for −26 dB S/N at 98 MHz		dBμV	10	15
4.	IF rejection at 90 MHz		dB	65	55
5.	Image rejection at 106 MHz		dB	60	50
6.	S/N with 1mV input at 98 MHz		dB	60	50
7.	Distortion at 500 mW	22.5kHz dev.	%	1	3
8.	Seek lock-in sensitivity	DX LOCAL	dBμV dBμV	24 48	24 ± 6 48 ± 6
9.	Power output 10% distortion		W	4.5	4

FM STEREO Section

	Description	Unit	Norminal	Limit
1.	Separation with 1mV input at 1000Hz with BPF	dB	25	20
2.	SDS (−10dB SEP)	dBμV	45	45 ± 6
3.	Stereo indicator sensitivity at 98 MHz	dBμV	12	12 ± 5

MW Section

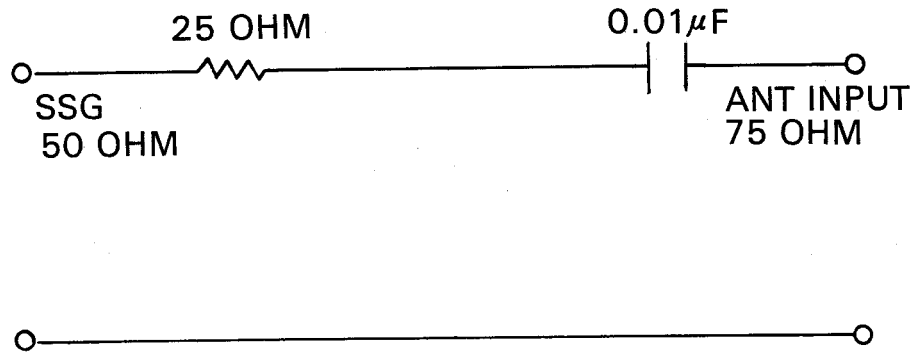
	Description	Unit	Norminal	Limit
1.	Frequency range	kHz	531 ~ 1602	531 ± 5 – 1602 ± 5
2.	Intermediate frequency	kHz	450	450 ± 5
3.	Sensitivity for −26 dB S/N at 603 kHz	dBμV	30	36
	Sensitivity for −26 dB S/N at 999 kHz	dBμV	30	36
	Sensitivity for −26 dB S/N at 1404 kHz	dBμV	30	36
4.	Selectivity (Off-tuning 9 kHz) at 999 kHz	dB	80	50
5.	If rejection at 603 kHz	dB	60	55
6.	Image rejection at 1404 kHz	dB	50	40
7.	S/N with 5mV at 999 kHz	dB	50	40
8.	Distortion at input 1 mV 999 kHz	%	1	3
9.	Power output 10% distortion	W	4.5	4

TAPE Section

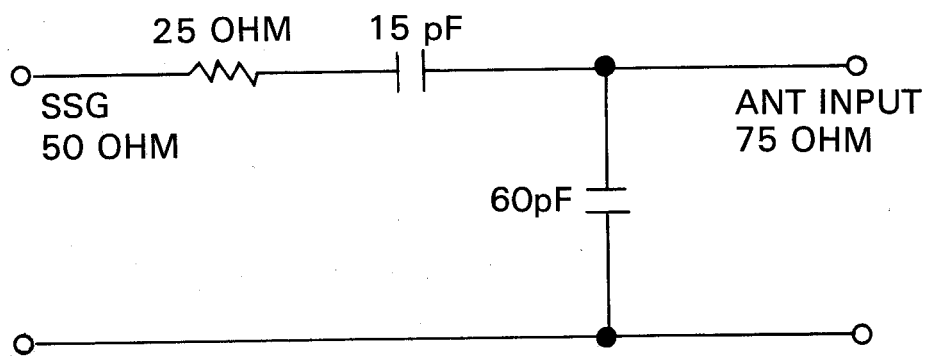
	Description	TEAC Test Tape	Unit	Norminal	Limit
1.	S/N at 1000Hz 500 mW, unweighted	MTT-112B	dB	50	40
2.	Crosstalk at 1000Hz	MTT-121	dB	40	35
3.	Channel separation at 1000Hz	MTT-141	dB	38	30
4.	Playback frequency response −6dB down frequency range	MTT-256	Hz	50 – 12500	100 – 8000
5.	Wow & Flutter at 3kHz JIS weighted	MTT-111N	%	0.25	0.35
6.	Tape speed at 3000Hz	MTT-111N	%	±1	+3, −2
7.	Distortion at 500mW at 1000 Hz	MTT-118	%	1	3
8.	Power output at 1000Hz 10% distortion	MTT-112B	W	4.5	4

NOTE: Nominal specs represent the design specs; all units should be able to approximate these-some will exceed and some may drop slightly below these specs. Limit specs represent the absolute worst condition which still might be considered acceptable; in no case should a unit perform to less than within any limit spec.
*1μV = 0dBμV AT SET

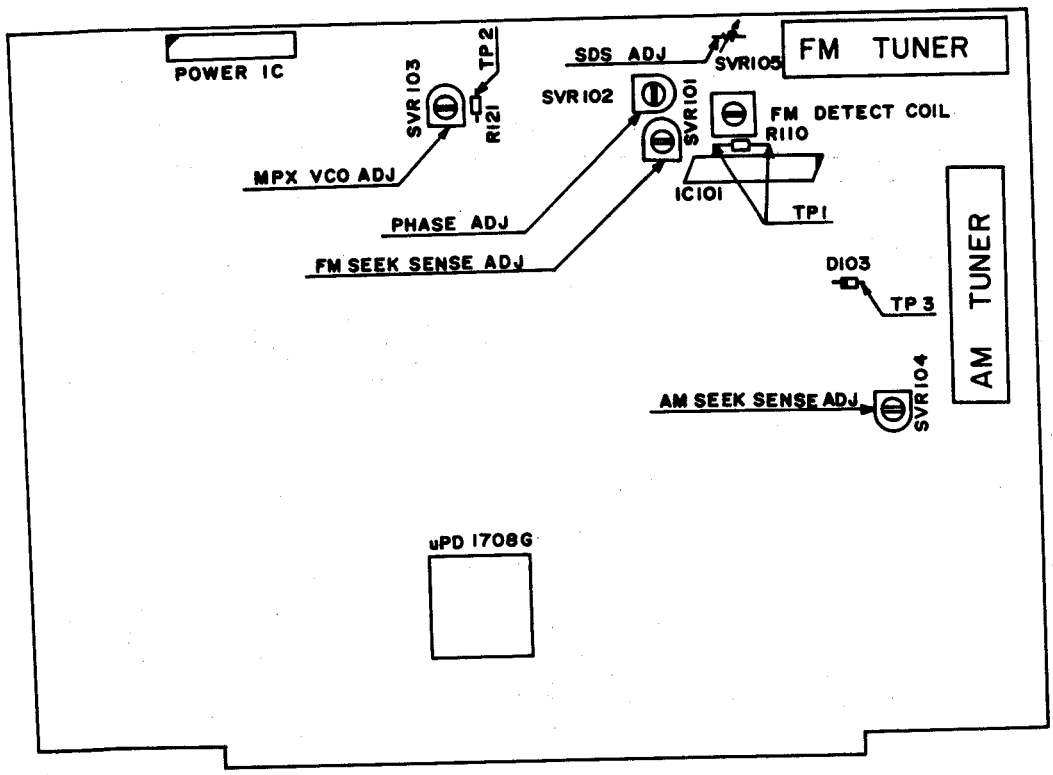
FM DUMMY ANTENNA



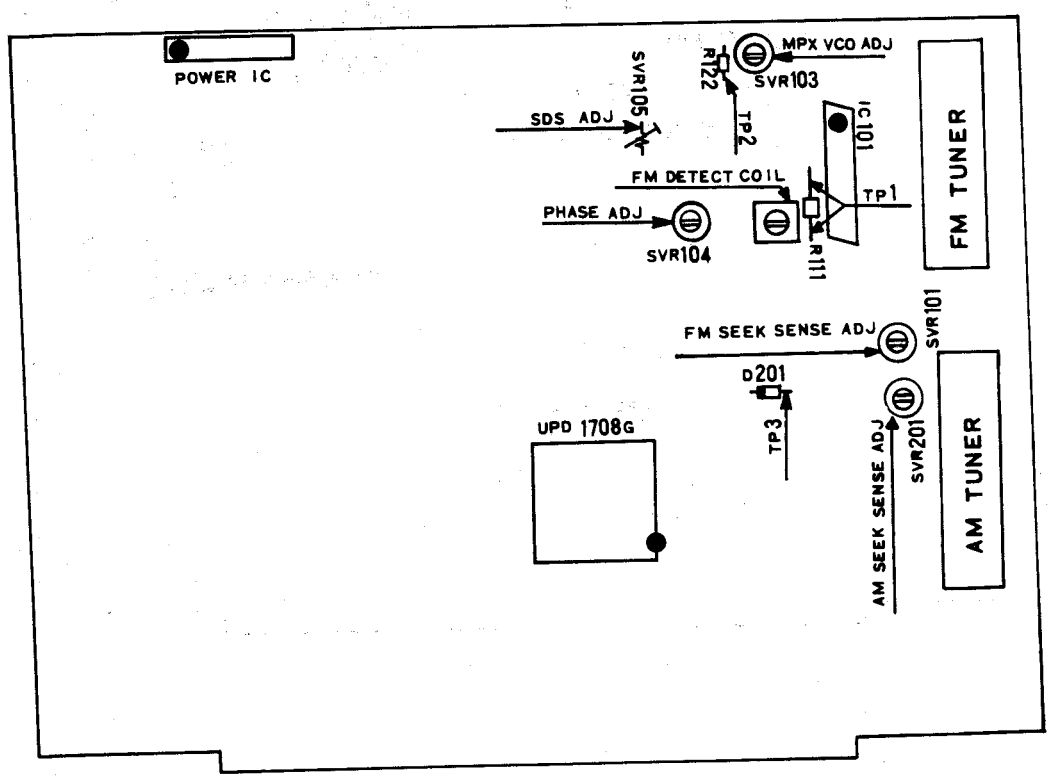
MW DUMMY ANTENNA



■ ALIGNMENT PROCEDURE (DC 318)



■ ALIGNMENT PROCEDURE (DC 418)



1-1. FM ADJUST (DC-318)

•MEASURING INSTRUMENTS

1. AC VOLT METER
2. POWER SUPPLY (DC 14.4V)
3. OSCILLOSCOPE
4. STANDARD SIGNAL GENERATOR
5. STEREO SIGNAL GENERATOR
6. FREQUENCY COUNTER
7. 1μV = 0dBμV AT SET

CASE	CONDITIONS	PART TO BE ADJUSTED	ADJUSTING STEP
FM IF	SSG FREQUENCY: 98MHz MOD.: 22.5KHz OUTPUT: 60dBμV	FM TUNER DETECT COIL	TURN DETECT COIL UNTIL BOTH OUTPUT FROM TP1 (R110 27KOHM) CAN BE CHANGED TO 0V.
SEEK SENSE	SSG FREQUENCY: 98MHz MOD.: 22.5KHz OUTPUT: 24dBμV	SEMI V/R SVR101 (100KB)	1. ADJUST SEMI V/R TILL DC VOLTAGE COME TO LOW LEVEL FROM HIGH LEVEL WITH A SCOPE PROBE. 2. ADJUST SEMI V/R BY PUSHING SEEK BOTTON TILL THE FREQUENCY ON DISPLAY STOP TO 98MHz.
MPX VCO	SSG FREQUENCY: 98MHz MOD.: 30KHz MAIN: 22.5KHz PILOT: 7.5KHz OUTPUT: 60dBμV	SEMI V/R SVR103 (10KB)	TURN THE SSG'S PILOT SIGNAL OFF AND TP2 SHOULD BE ADJUSTED TO GET THE FREQUENCY 76KHz, SEMI V/R (SVR103) SHOULD BE CONTROLLED.
ADJUSTING SDS	SSG FREQUENCY: 98MHz MOD.: 30KHz MAIN: 22.5kHz PILOT: 7.5kHz OUTPUT: 45dBμV SET: STEREO STATE	SEMI V/R SVR105 (100KB)	ADJUST SEMI V/R (SVR104) TILL DIFFERENCE BETWEEN L.CH AND R.CH BECOMES −10dB
ADJUSTING SEPARATION	SSG FREQUENCY: 98MHz MOD.: 30kHz MAIN: 22.5kHz PILOT: 7.5kHz OUTPUT: 60dBμV SET: STEREO STATE	SEMI V/R SVR102 (50KB)	ADJUST SEMI V/R (SVR102) TILL SEPARATION CAN BE AT IT'S MAXIMUM STATE IN EITHER L.CH OR R.CH OF SSG.

1-2. MW ADJUST (DC 318)

•MEASURING INSTRUMENTS

1. AC VOLT METER
2. POWER SUPPLY (DC 14.4V)
3. OSCILLOSCOPE
4. STANDARD SIGNAL GENERATOR
5. DC VOLTMETER
6. 1μV = 0dBμV AT SET

CASE	CONDITIONS	PART TO BE ADJUSTED	ADJUSTING STEP
SEEK SENSE	MW SSG FREQUENCY: 999KHz MOD.: 30% OUTPUT: 30dBμV	SEMI V/R SVR104 (20KB)	1. ADJUST SEMI V/R TILL DC VOLTAGE OF THE TP3 DIODE (D103) BECOMES ABOUT 2.8V 2. ADJUST SEMI V/R BY PUSHING SEEK BUTTON TILL THE FREQUENCY ON THE DISPLAY STOP TO 999KHz.

2-1. FM ADJUST (DC-418)

•MEASURING INSTRUMENTS

1. AC VOLT METER
2. POWER SUPPLY (DC 14.4V)
3. OSCILLOSCOPE
4. STANDARD SIGNAL GENERATOR
5. STEREO SIGNAL GENERATOR
6. FREQUENCY COUNTER
7. 1μV=0dBμV AT SET

CASE	CONDITIONS	PART TO BE ADJUSTED	ADJUSTING STEP
FM IF	SSG FREQUENCY: 98MHz MOD.: 22.5KHz OUTPUT: 60dBμV	FM TUNER DETECT COIL	TURN DETECT COIL UNTIL BOTH OUTPUT FROM TP1 (R111 33KOHM) CAN BE CHANGED TO 0V.
SEEK SENSE	SSG FREQUENCY: 98MHz MOD.: 22.5KHz OUTPUT: 24dBμV	SEMI V/R SVR101 (100KB)	1. ADJUST SEMI V/R TILL DC VOLTAGE COME TO LOW LEVEL FROM HIGH LEVEL WITH A SCOPE PROBE. 2. ADJUST SEMI V/R BY PUSHING SEEK BOTTON TILL THE FREQUENCY ON DISPLAY STOP TO 98MHz.
MPX VCO	SSG FREQUENCY: 98MHz MOD.: 30KHz MAIN: 22.5KHz PILOT: 7.5KHz OUTPUT: 60dBμV	SEMI V/R SVR103 (10KB)	TURN THE SSG'S PILOT SIGNAL OFF AND TP2 SHOULD BE ADJUSTED TO GET THE FREQUENCY 76KHz, SEMI V/R (SVR103) SHOULD BE CONTROLLED.
ADJUSTING SDS	SSG FREQUENCY: 98MHz MOD.: 30KHz MAIN: 22.5kHz PILOT: 7.5kHz OUTPUT: 45dBμV SET: STEREO STATE	SEMI V/R SVR105 (100KB)	ADJUST SEMI V/R (SVR105) TILL DIFFERENCE BETWEEN L.CH AND R.CH BECOMES −10dB
ADJUSTING SEPARATION	SSG FREQUENCY: 98MHz MOD.: 30kHz MAIN: 22.5kHz PILOT: 7.5kHz OUTPUT: 60dBμV SET: STEREO STATE	SEMI V/R SVR104 (50KB)	ADJUST SEMI V/R (SVR104) TILL SEPARATION CAN BE AT IT'S MAXIMUM STATE IN EITHER L.CH OR R.CH OF SSG.

2-2. MW ADJUST (DC-418)

•MEASURING INSTRUMENTS

1. AC VOLT METER
2. POWER SUPPLY (DC 14.4V)
3. OSCILLOSCOPE
4. STANDARD SIGNAL GENERATOR
5. DC VOLTMETER
6. 1μV=0dBμV AT SET

CASE	CONDITIONS	PART TO BE ADJUSTED	ADJUSTING STEP
SEEK SENSE	MW SSG FREQUENCY: 999KHz MOD.: 30% OUTPUT: 30dBμV	SEMI V/R SVR201 (50KB)	1. ADJUST SEMI V/R TILL DC VOLTAGE OF THE DIODE (D201) BECOMES ABOUT 2.8V 2. ADJUST SEMI V/R BY PUSHING SEEK BUTTON TILL THE FREQUENCY ON THE DISPLAY STOP TO 999KHz.

3. TAPE ADJUST (DC318/DC418)

•MEASURING INSTRUMENTS

1. AC VOLT METER
2. POWER SUPPLY (DC 14.4V)
3. OSCILLOSCOPE
4. 1μV=0dBμV AT SET

CASE	CONDITIONS	PART TO BE ADJUSTED	ADJUSTING STEP
ADJUSTING AZIMUTH	1. TEST TAPE: MTT113CN (8KHz) 2. VOLUME CENTER *ALL SWITCH: OFF •TONE CONTROL: MAX •TRE/BASS CONTROL: CENTER	HEAD SCREW	1. ADJUST HEAD SCREW OF THE DECK TILL THE OUTPUT LEVEL CAN BE AT IT'S MAXIMUM STATE FOR FORWARD STATE.

Fig. 1

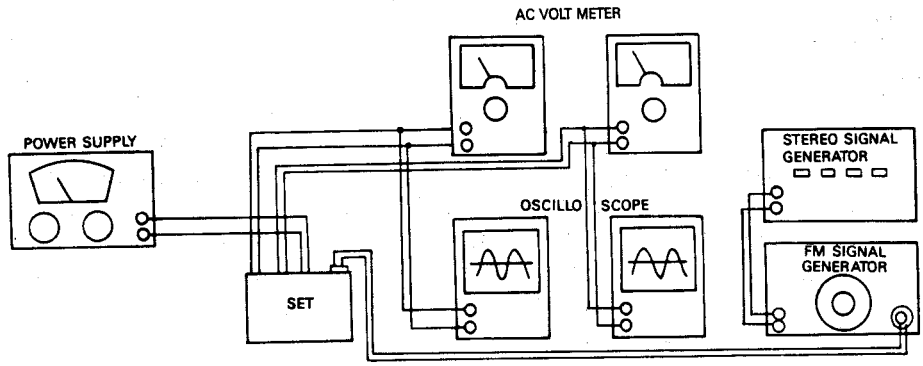


Fig. 2

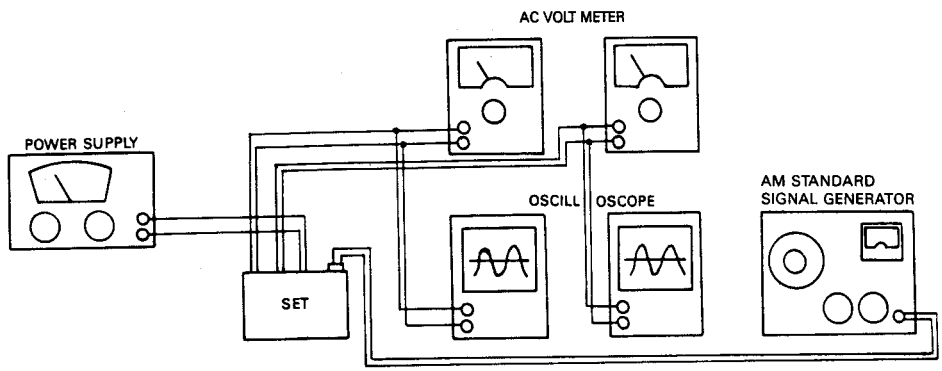


Fig. 3

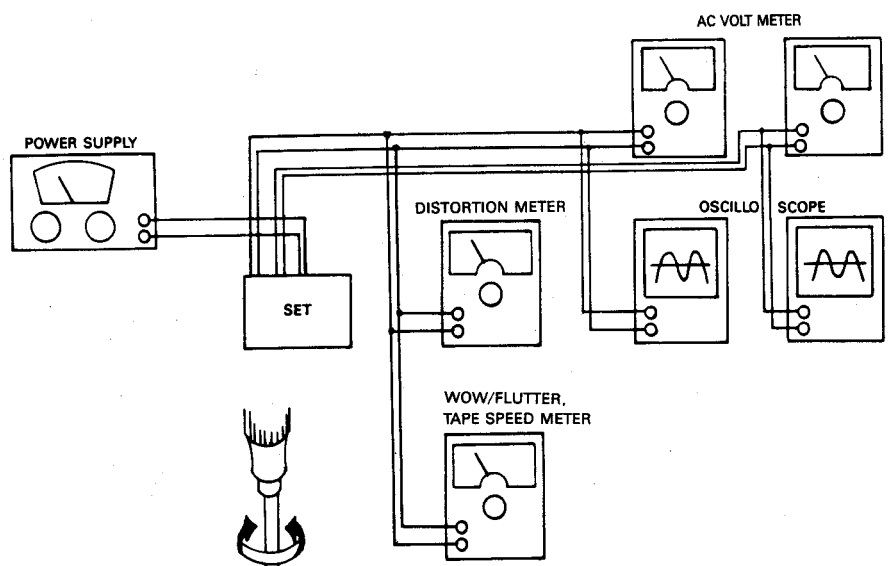
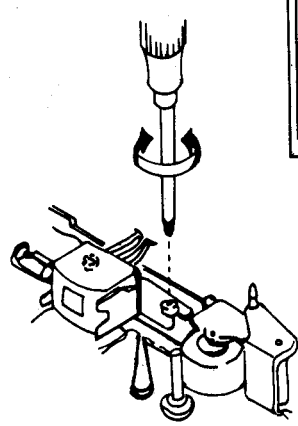
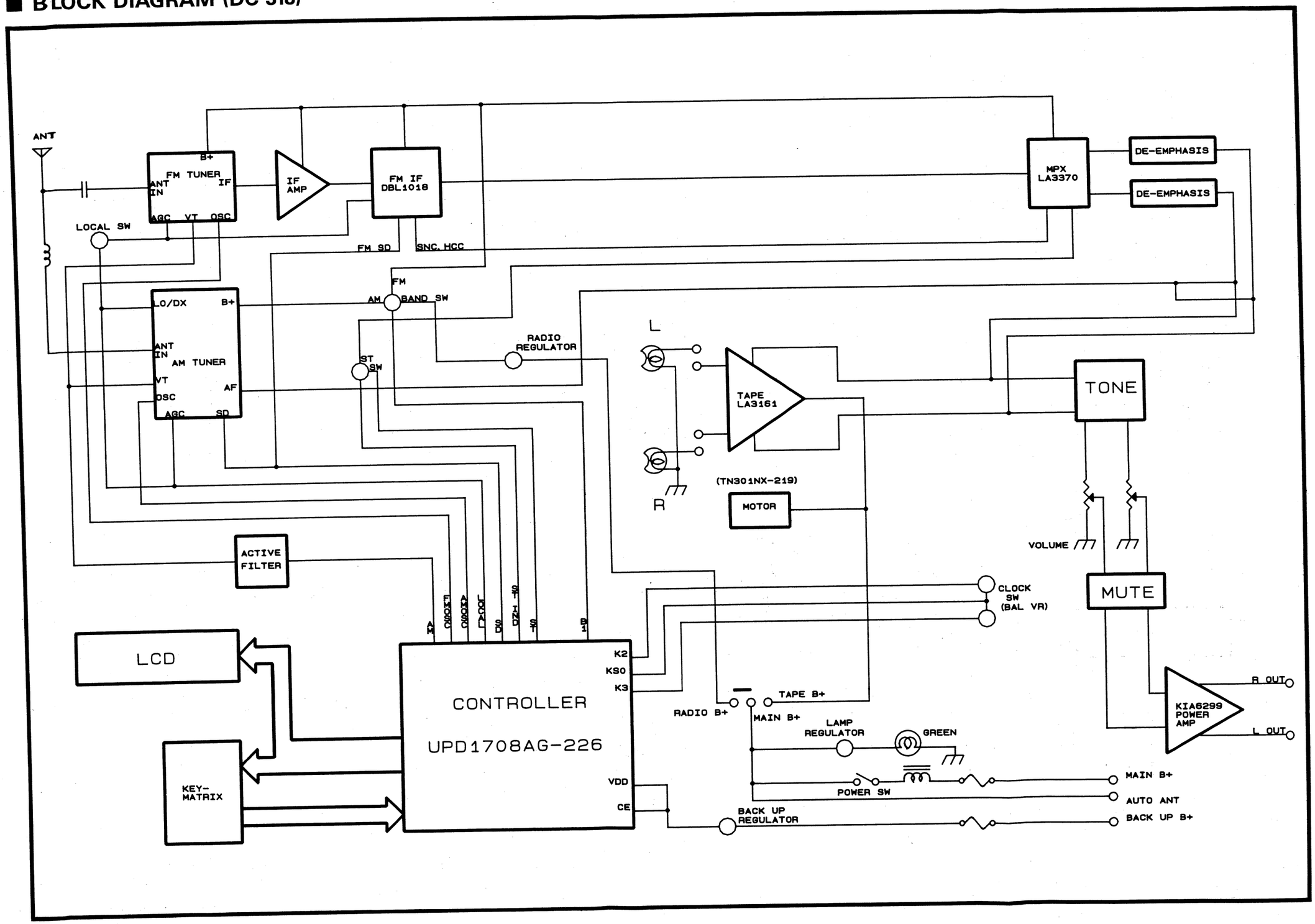


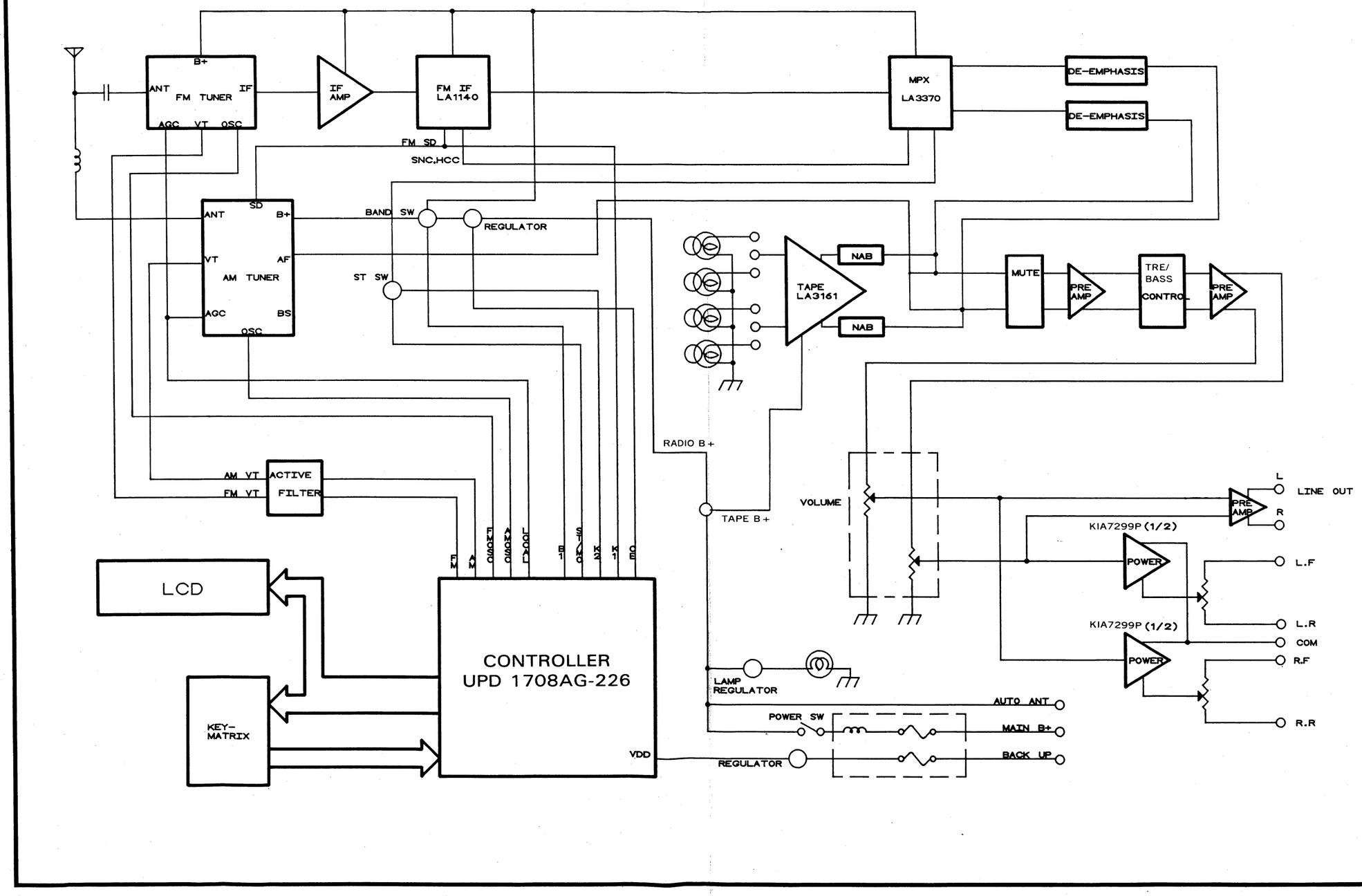
Fig. 4



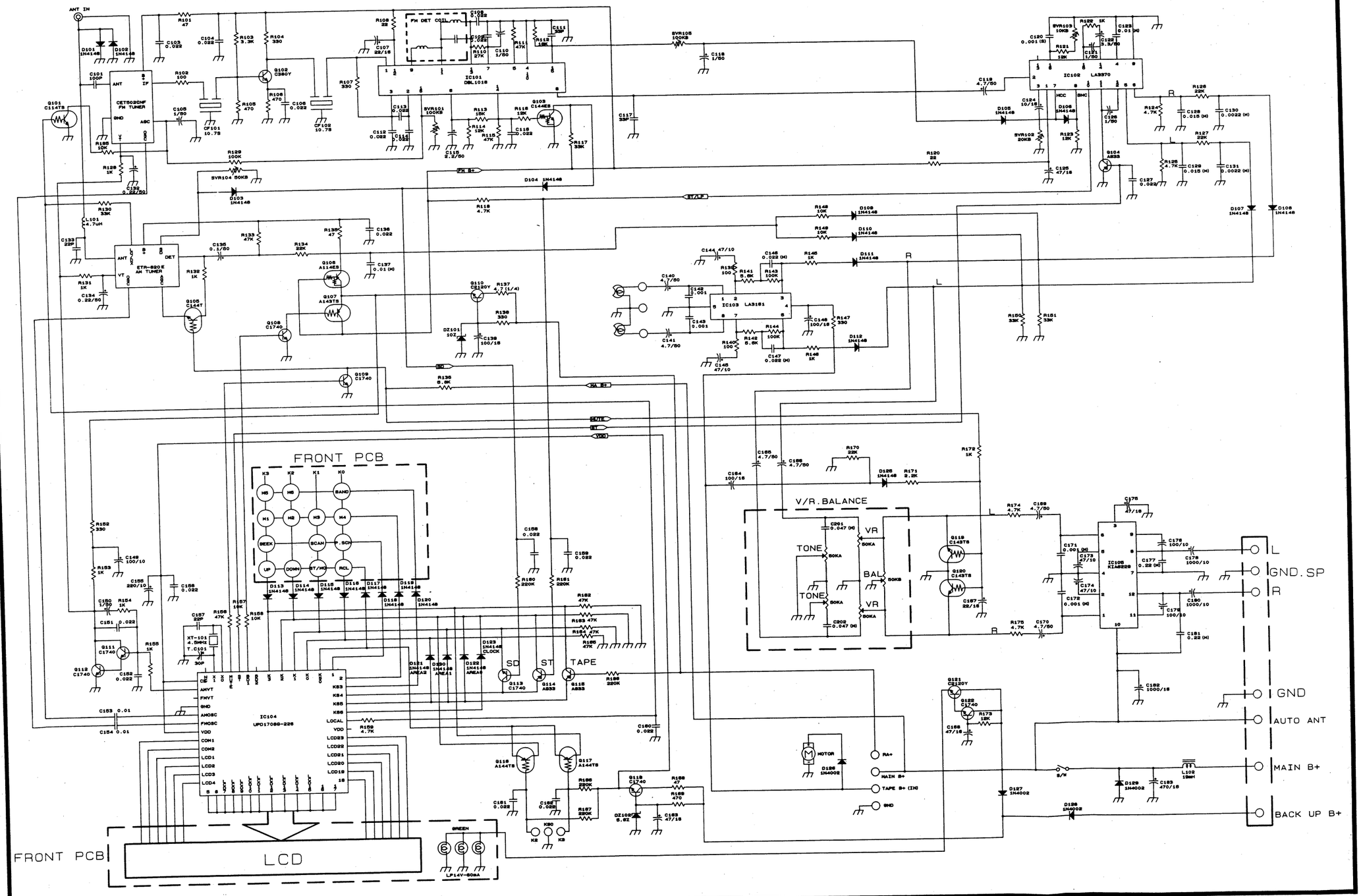
■ BLOCK DIAGRAM (DC 318)



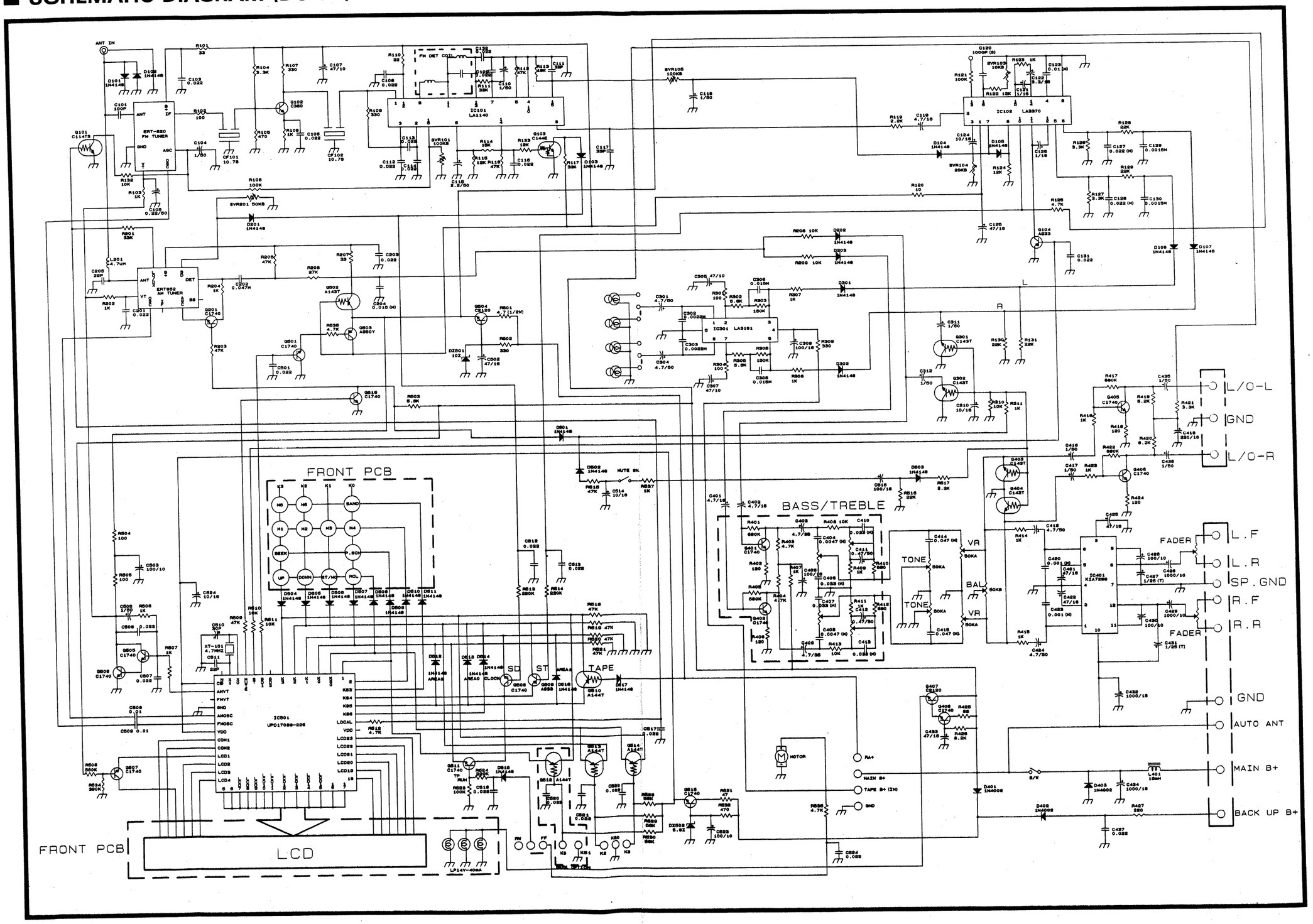
■ BLOCK DIAGRAM (DC 418)



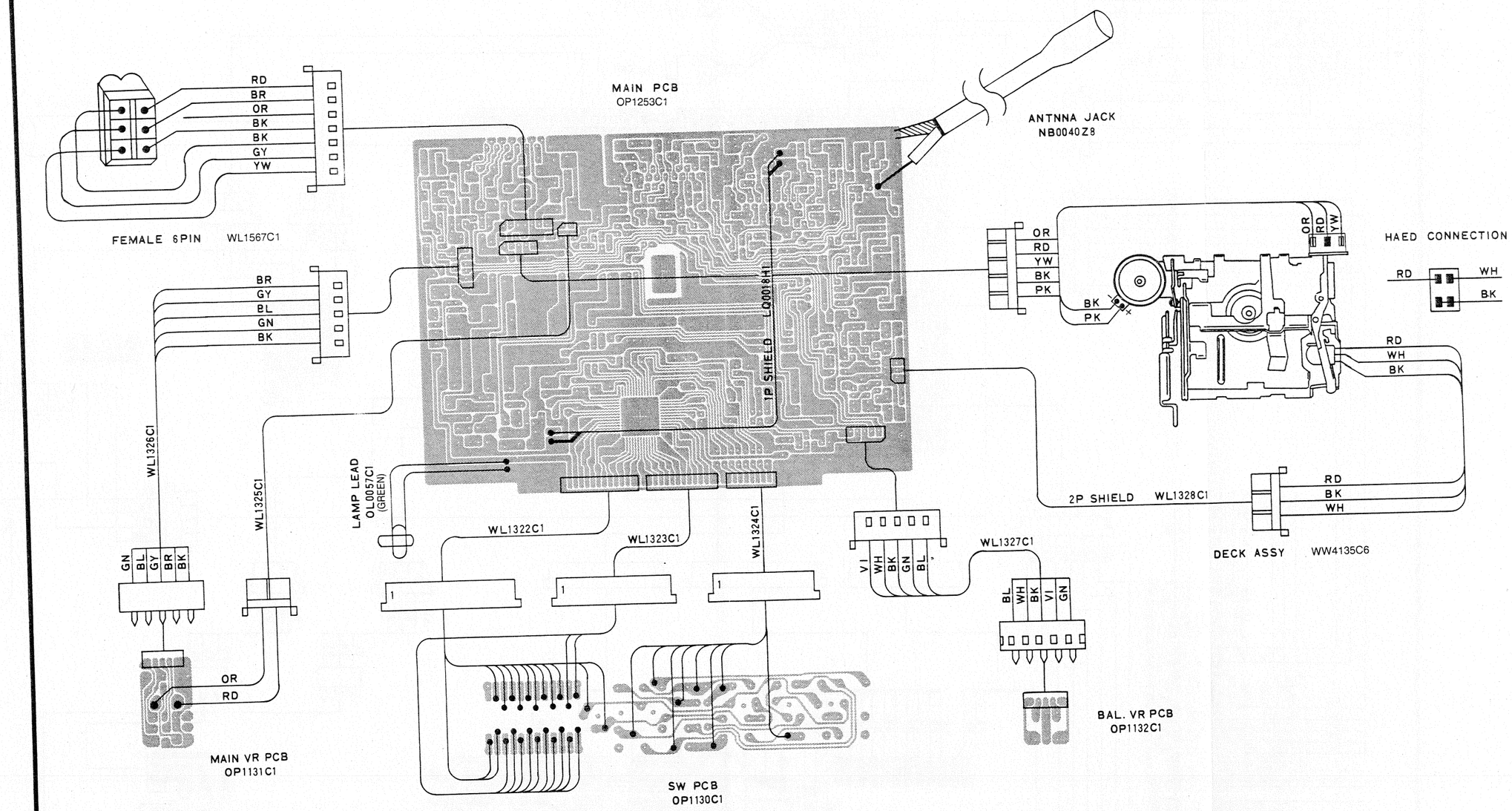
■ SCHEMATIC DIAGRAM (DC 318)



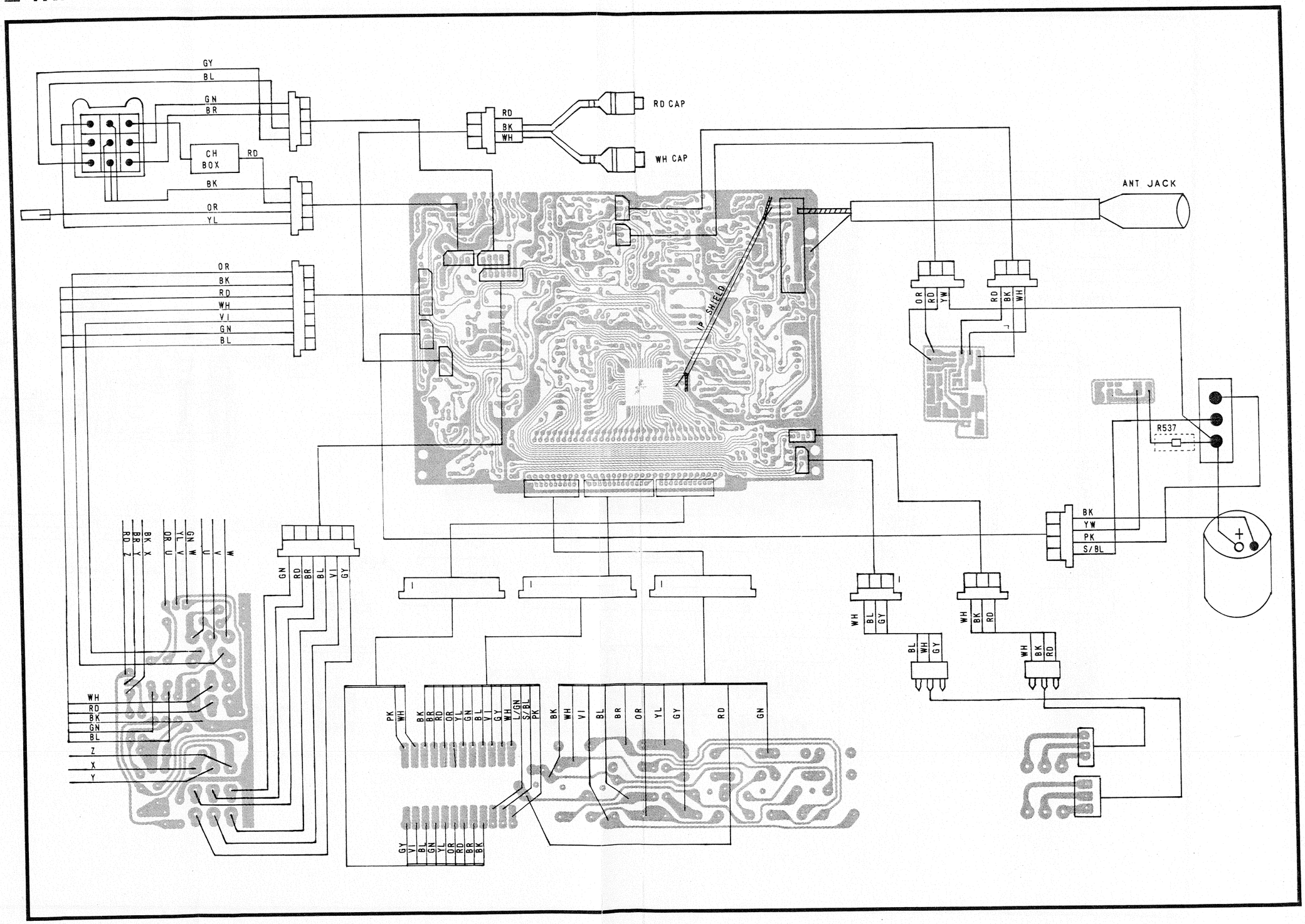
■ SCHEMATIC DIAGRAM (DC 418)



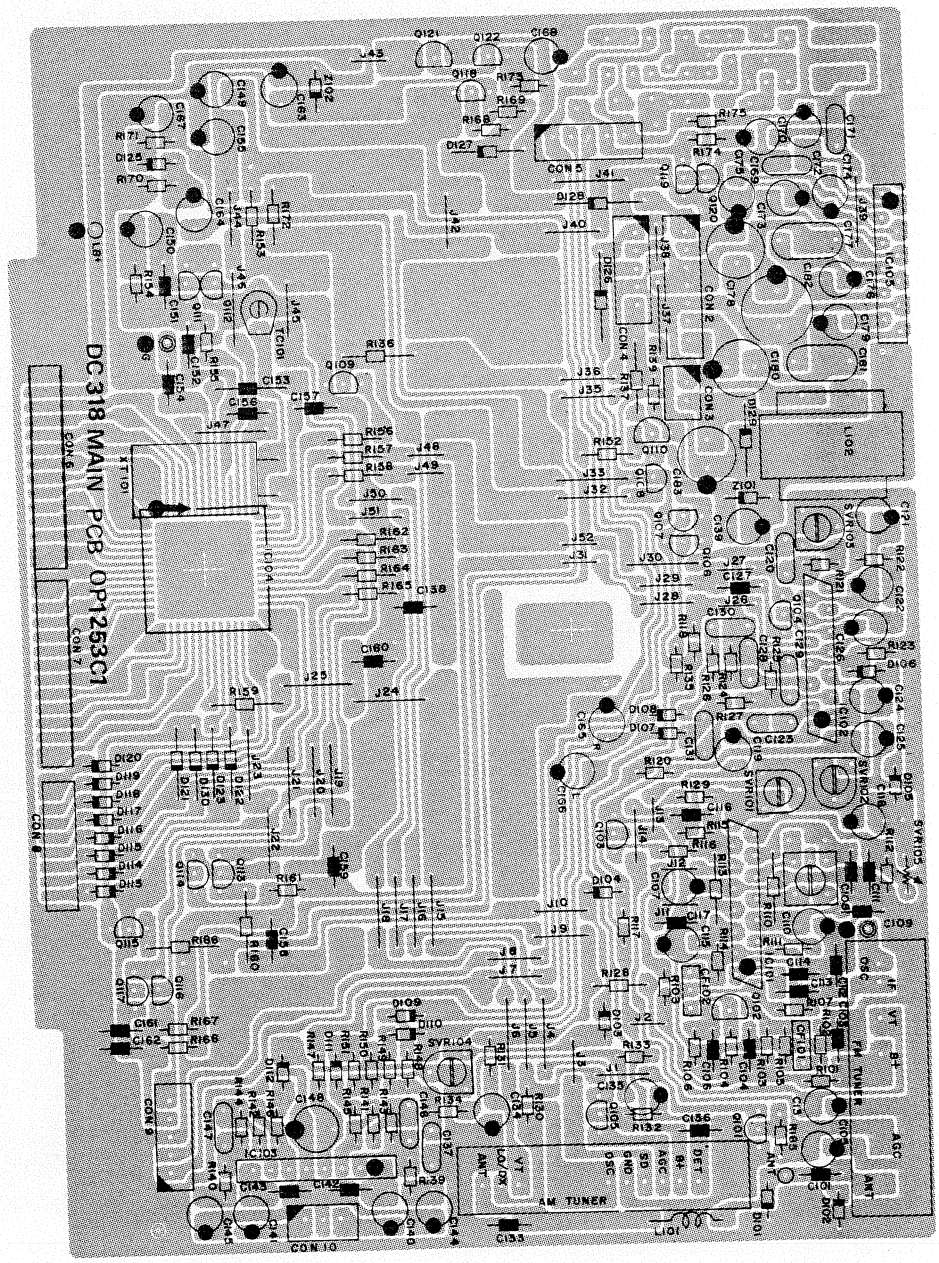
■ WIRING DIAGRAM (DC 318)



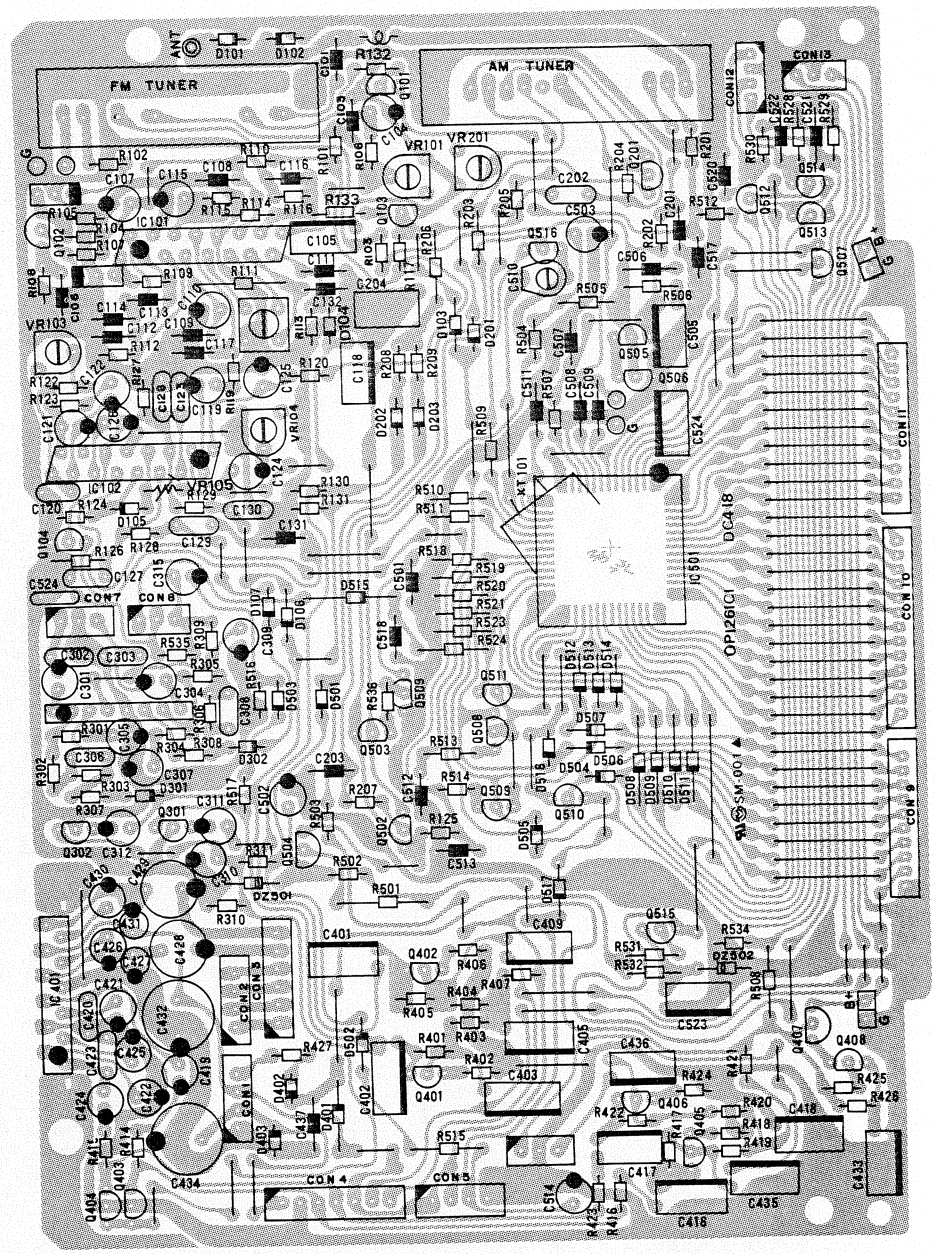
■ WIRING DIAGRAM (DC 418)



MAIN P.C. BOARD (DC 318)

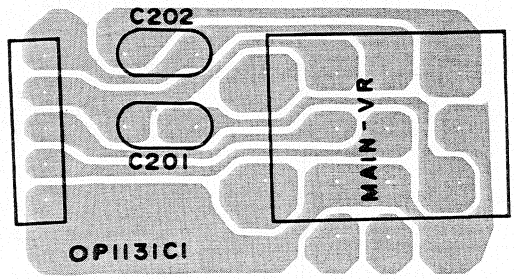


MAIN P.C. BOARD (DC 418)

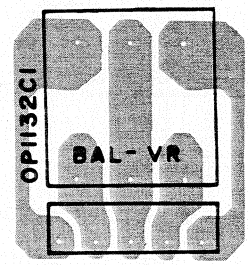


SUB P.C. BOARD

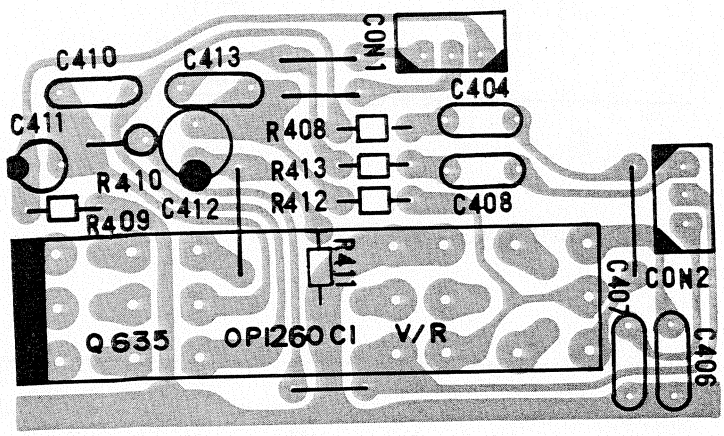
VR P.C. BOARD



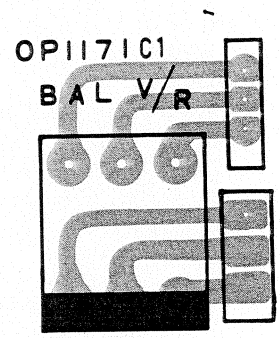
DC 318 MAIN-VR



DC 318 BAL-VR

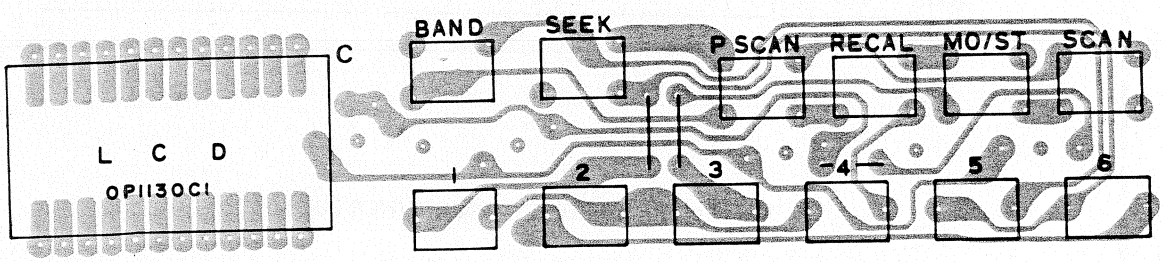


DC 418 MAIN-VR

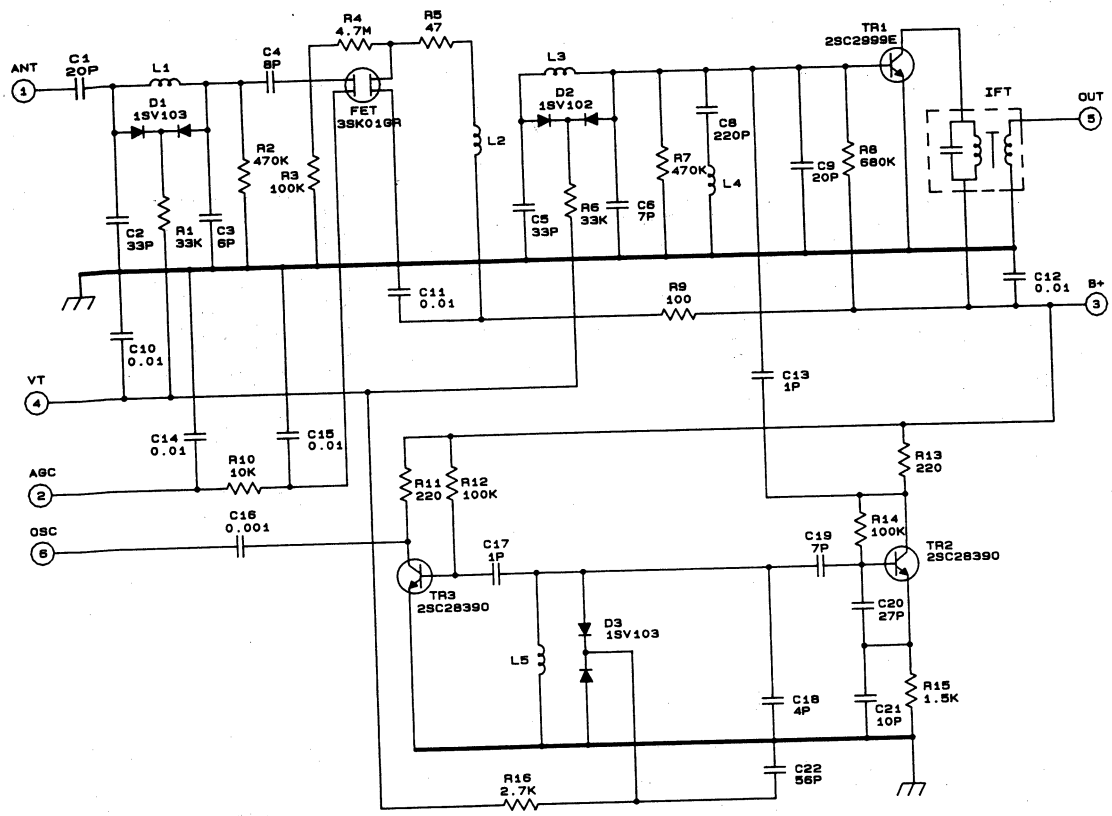


DC 418 BAL VR

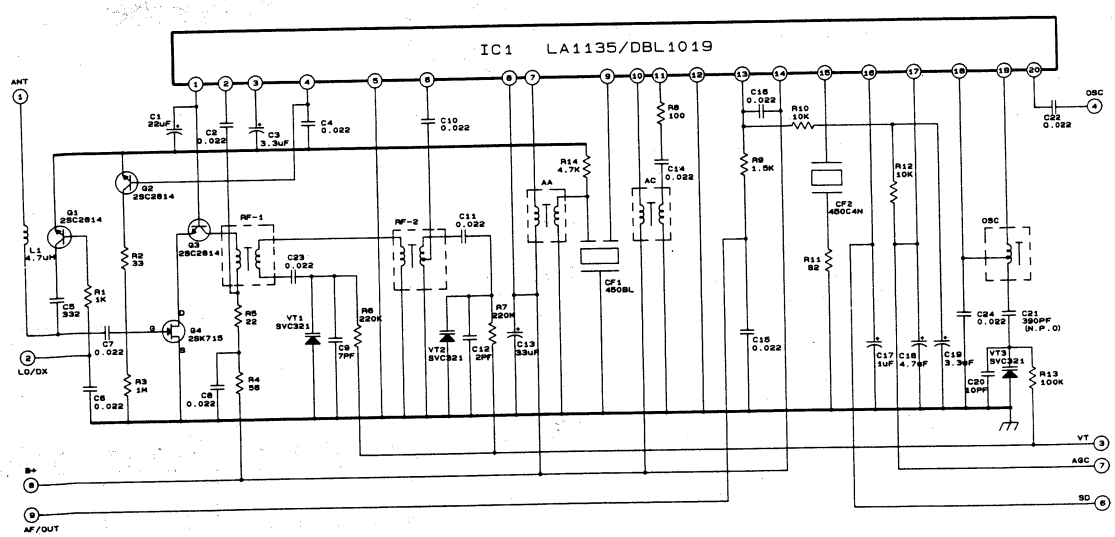
FRONT P.C. BOARD (DC 318/DC 418)



■ MODULE SCHEMATIC DIAGRAM (DC 318/DC 418)



FM ELECTRONIC TUNER (OT0004C4)



MW ELECTRONIC TUNER (OT0060C1)

■ ELECTRICAL PART LIST (DC 318)

MAIN PCB ASS'Y

DESCRIPTION	SPECIFICATION	SYMBOL NO.
D-ZENER	1/2W 5.6V	Z102
D-ZENER	1/2W 10V	Z101
D-RECTIFIER	1N4002	D126, 127, 128, 129
WIRE, SHIELD	GY230 (1P SHIELD 10/10)	
WAFER	5267-02A	CON3
WAFER	5267-07A	CON2
WAFER	5267-05A	CON4, 5, 9
WAFER	5267-03A	CON10
WAFER	53015-0810	CON8
WAFER	53015-1310	CON6
WAFER	53015-1210	CON7
COIL, INDUCTOR	LAL03NA4R7K	L101
FILTER, CERAMIC	SFE10. 7MS3H-A	CF101, 102
COIL, DETECT-FM	SFI001/K5046D	
LAMP, LEAD	14V/60MA (3PI L=70M/M)	
TUNER, FM	ACE28FV/CET502CNF-V	TAEBONG ELE
TUNER, AM	ERT-852E	SONGDO ELE
X-TAL	4.5MHZ (HC18U)	XT101
COIL, CHOKE	19H (19×5.5×2P)	L102
C, ELECTROLYTIC	16V/470UF MS12LN, SUNG HAN	C183
C, ELECTROLYTIC	10V/1000UF MS12LN	C178, 180
C, ELECTROLYTIC	16V/1000UF MSLA, SUNG HAN	C182
C, POLYESTER	CQ921-50V-0.22UF-K	C177, 181
C, POLYPROPYLENE	CQP-50V-0.001UF-J	C120
C, TRIMMER	CV05HSB300-30PF	TC101
IC, CONTROLLER	UPD1708AG226	IC104
IC, POWER AMP	KIA7299P	IC105
IC, EQ AMP	LA3161	IC103
IC, MPX FM	LA3370	IC102
IC, IF FM	DBL 1018	IC101
VR, SEMIFIXED	RVM 637A (H-TYPE) 10KB	SVR103
VR, SEMIFIXED	RVM 637A (H-TYPE) 100KB	SVR101
VR, SEMIFIXED	RVM637A (H-TYPE) 20KB	SVR102, 104
VR, SEMIFIXED	RVM621V01 (2P-100KB)	SVR105
D-SWITCHING	1N4148M	D101-123, 125, 130
PCB, MAIN	198×138×1.6T (XPC)	
C, ELECTROLYTIC	50V/0.1UF 5×11	C135
C, ELECTROLYTIC	50V/0.22UF 5×11	C132, 134
C, ELECTROLYTIC	50V/1UF 5×11	C105, 110, 118, 121,
		126, 150
C, ELECTROLYTIC	50V/2.2UF 5×11	C115
C, ELECTROLYTIC	50V/3.3UF 5×11	C122
C, ELECTROLYTIC	50V/4.7UF 5×11	C119, 140, 141, 165,
		166, 169, 170
C, ELECTROLYTIC	16V/10UF 5×11	C124
C, ELECTROLYTIC	16V/22UF 5×11	C107, 167
C, ELECTROLYTIC	10V/47UF 5×11	C144, 145, 173, 174
C, ELECTROLYTIC	16V/47UF 5×11	C125, 163, 168, 175
C, ELECTROLYTIC	10V/100UF 5×11	C149, 176, 179
C, ELECTROLYTIC	16V100UF 6.3×11	C139, 148, 164
C, ELECTROLYTIC	10V220UF 6.3×11	C155
C, POLYESTER	CQ921-50V-0.001UF-J	C171, 172
C, POLYESTER	CQ921-50V-0.01UF-J	C123, 137
C, POLYESTER	CQ921-50V-0.015UF-J	C128, 129
C, POLYESTER	CQ921-50V-0.0022UF-J	C130, 131
C, POLYESTER	CQ921-50V-0.022UF-J	C146, 147
C, CERAMIC	50V-100PF-BY-K	C101
C, CERAMIC	50V-0.001UF-BY-K	C142, 143
C, CERAMIC	50V-0.01UF-Y-M	C153, 154
C, CERAMIC	50V-22PF-CH-J	C133, 157
C, CERAMIC	50V-0.022UF-F-Z	C103, 104, 106, 112,
		113, 114, 108, 109,
		116, 127, 136 C151,
		152 156, 158, 159,
		160, 161, 162
C, CERAMIC	50V-33PF-CH-J	C111, 117

DESCRIPTION	SPECIFICATION	SYMBOL NO.
R, CARBON FILM	1/6W-100-J-26MM	R102, 139, 140
R, CARBON FILM	1/6W-1K-J-26MM	R122, 128, 131, 132,
		145, 146, 153, 154,
		155, 172
R, CARBON FILM	1/6W-10K-J-26MM	R148, 149, 157, 158,
		185
R, CARBON FILM	1/6W-100K-J-26MM	R129, 143, 144
R, CARBON FILM	1/6W-12K-J-26MM	R114, 116, 121, 173,
		123
R, CARBON FILM	1/6W-15K-J-26MM	R113
R, CARBON FILM	1/6W-18K-J-26MM	R112
R, CARBON FILM	1/6W-22-J-26MM	R108, 120
R, CARBON FILM	1/6W-2.2K-J-26MM	R171
R, CARBON FILM	1/6W-22K-J-26MM	R134, 170, 126, 127
R, CARBON FILM	1/6W-220K-J-26MM	R160, 161, 166, 167,
		186
R, CARBON FILM	1/6W-27K-J-26MM	R110
R, CARBON FILM	1/6W-330-J-26MM	R104, 107, 138, 147,
		152
R, CARBON FILM	1/6W-3.3K-J-26MM	R103
R, CARBON FILM	1/6W-33K-J-26MM	R117, 150, 151, 130
R, CARBON FILM	1/4W-4.7-J-26MM	R137
R, CARBON FILM	1/6W-47-J-26MM	R101, 135, 168
R, CARBON FILM	1/6W-470-J-26MM	R105, 106, 169
R, CARBON FILM	1/6W-4.7K-J-26MM	R118, 124, 125, 174,
		175, 159
R, CARBON FILM	1/6W-47K-J-26MM	R111, 115, 133, 156,
		162, 163, 164, 165
R, CARBON FILM	1/6W-5.6K-J-26MM	R141, 142
R, CARBON FILM	1/6W-6.8K-J-26MM	R136
TR	DTA114ESTN/KRA2202 (102M)	Q106
TR	DTA143TSTP/KRA2210 (110M)	Q107
TR	DTA144TSTP	Q116, 117
TR	2SA933STN	Q104, 114, 115
TR	DTC114TSTP/KRC1211 (111M)	Q101
TR	DTC143TSTP/KRC1210 (110M)	Q119, 120
TR	DTC144ESTP/KRC1204 (104M)	Q103
TR	DTC144TSTP	Q105
TR	KTC380Y	Q102
TR	2SC1740S	Q108, 109, 111, 112,
		118, 122, 213
TR	C2120Y	Q121, 110
JACK, CAR ANT	E40026A 12×9.5-200MM	
CONNECTOR ASS'Y	CHF2036 (7P FEMALE)	
CONNECTOR ASS'Y	CHM2041 (6P MALE)	

SW P.C.B ASS'Y

DESCRIPTION	SPECIFICATION	SYMBOL NO.
WIRE, COPPER	SN 5 10/10 PI 0.6	
WIRE, COPPER	SN 6 10/10 PI 0.6	
LCD	SLC-4129RS/C1	
LAMP, PILOT	PI3 14V 60MA PCB TYPE	
PCB, S/W	101×21×1.6T (XPC)	
S/W, TACT	JTP 1230	
S/W, TACT	JTP 1243	
CONNECTOR ASSY	P=2.0M/M 13P (#30)	(S/W)
CONNECTOR ASSY	P=2.0M/M 12P (#30)	(S/W)
CONNECTOR ASSY	P=2.0M/M 8P (#30)	(S/W)

VR-BAL P.C.B ASS'Y

DESCRIPTION	SPECIFICATION	SYMBOL NO.
PCB, VR MAIN	20×33×1.6T (XPC)	
PCB, VR BAL	18×20×1.6T (XPC)	
C, POLYESTER	CQ921-50V-0.047UF-K	C201, 202
VR, ROTARY	V12L5DS (3B50K)	
V/R, MAIN	V12L5 DG9S	
CONNECTOR ASSY	P=2.5 2P	(V/R)
CONNECTOR ASSY	P=2.5M/M BOARD IN 5P	(V/R)
CONNECTOR ASSY	P=2.5M/M BOARD IN 5P	(BAL)

DECK ASS'Y

DESCRIPTION	SPECIFICATION	SYMBOL NO.
CONNECTOR ASSY	P=2.5M/M 3P (SHIELD)	DECK
CONNECTOR ASSY	P=2.5M/M 5P	DECK
DECK CASSETTE	TN301NX-219	

■ ELECTRICAL PART LIST (DC 418)

MAIN PCB ASS'Y

DESCRIPTION	SPECIFICATION	SYMBOL NO.
D-RECTIFIER	1N4002	D401, 402, 403
WIRE, SHIELD 1533#28	GY 120	
WAFER	5267-04A	CON1, 2, 5
WAFER	5267-07A	CON4
WAFER	5267-06A	CON3
WAFER	5267-03A	CON6, 7, 8, 13
WAFER	53014-3P	CON12
WAFER	53015-1310	CON10
WAFER	53015-10P	CON9
WAFER	53015-11P	CON11
COIL, INDUCTOR	LAL03NA4R7K	L201
FILTER, CERAMIC-FM	SFE10.7MS2A	CF101, 102
COIL, DETECT-FM	SFI001/K5046D	
LAMP, LEAD	14V/60MA (3PI L=70M/M)	
TUNER, FM	ACE28FV/CET502CNF-V	
TUNER, AM	ERT-852E	
X-TAL	4.5MHZ (HC18U)	XT101
C, ELECTROLYTIC	10V/47UF 5×11	C305, 307, 107, 421,
		C422
C, ELECTROLYTIC	10V/100UF 6.3×11	C523, 426, 430
C, ELECTROLYTIC	16V/47UF 5×11	C502, 125, 425
C, ELECTROLYTIC	16V/100UF 6.3×11	C515, 309, 503, 405
C, ELECTROLYTIC	50V/0.22UF 4×7	C105
C, ELECTROLYTIC	50V/1UF 4×7	C108, 121, 126, 311,
		C312, 416, 417, 435,
		C436 505, 110, 104
C, ELECTROLYTIC	50V/2.2UF 4×7	C115
C, ELECTROLYTIC	50V/3.3UF 4×7	C122
C, ELECTROLYTIC	35V/4.7UF 4×7	C301, 304, 401, 402,
		C419, 424, 119, 403,
		C409
C, ELECTROLYTIC	16V/10UF 4×7	C124, 310, 514, 524
C, ELECTROLYTIC	16V/47UF 6.3×7	C433
C, ELECTROLYTIC	16V/220UF MS12LN, SUNG HAN	C418
C, ELECTROLYTIC	16V/1000UF MSLA, SUNG HAN	C432, 434
C, ELECTROLYTIC	10V/1000UF MSHA, SUNG HAN	C428, 429
C, POLYESTER	CQ921-50V-0.001UF-J	C420, 423
C, POLYPROPYLENE	CQP-50V-0.001UF-J	C120
C, TANTALUM	25V-1UF-M	C427, 431
C, TRIMMER	CV05A300V-30PF	C510
R, CARBON FILM	1/2W-4.7-J-P	R501
TR	2SC1740S	Q511
IC, CONTROLLER	UPD1708AG226	IC501
IC, POWER AMP	KIA7299P	IC401
IC, EQ AMP	LA3161	IC301
IC, IF FM	LA1140	IC101
IC, MPX FM	LA3370	IC102
VR, SEMIFIXED	RVW6FOR 10KB (H-TYPE)	SVR103
VR, SEMIFIXED	RVW6FOR 50KB (H-TYPE)	SVR, 104, 201
VR, SEMIFIXED	RVW6FOR 100KB (H-TYPE)	SVR101
VR, SEMIFIXED	RVM621V01 (2P-100KB)	SVR105
D-ZENER	1/2W 5.6V	DZ502
D-ZENER	1/2W 10V	DZ501
D-SWITCHING	1N4148M	D101, 102, 103, 104,
		D105, 106, 107, 301,
		D302, 201, 202, 203,
		D501, 502, 503, 504,
		D505, 506, 507, 508,
		D509, 510, 511, 512,
		D513, 514, 515, 516,
		D517
WIRE, COPPER	SN PI0.6 (2000M/ROLL)	
PCB, MAIN (DC418)	XPC 196×138×T0.6	
C, POLYESTER	CQ921-50V-0.01UF-J	C123
C, POLYESTER	CQ921-50V-0.0015UF-J	C129, 130
C, POLYESTER	CQ921-50V-0.015UF-J	C204, 306, 308
C, POLYESTER	CQ921-50V-0.022UF-J	C302, 303

DESCRIPTION	SPECIFICATION	SYMBOL NO.
C, POLYESTER	CQ921-50V-0.022UF-J	C127, 128, 524
C, POLYESTER	CQ921-50V-0.047UF-J	C202
C, CERAMIC	50V-100PF-BY-K	C101
C, CERAMIC	50V-0.01UF-Y-M	C508, 509
C, CERAMIC	50V-22PF-CH-J	C511, 205
C, CERAMIC	50V-0.022UF-F-Z	C103, 106, 108, 109,
		C112, 114, 116, 131,
		C132, 201, 203, 501,
		C506, 507, 512, 513,
		C517, 518, 437, 113,
		C521, 522
C, CERAMIC	50V-33PF-CH-J	C111, 117
R, CARBON FILM	1/6W-10-J-26MM	R120
R, CARBON FILM	1/6W-100-J-26MM	R102, 504, 505, 301,
		R304
R, CARBON FILM	1/6W-1K-J-26MM	R123, 202, 204, 307,
		R308, 506, 507, 414,
		R415, 416, 423, 311,
		R103, 407
R, CARBON FILM	1/6W-10K-J-26MM	R310, 510, 511, 208,
		R209, 132
R, CARBON FILM	1/6W-100-J-26MM	R523, 106
R, CARBON FILM	1/6W-120-J-26MM	R418, 424
R, CARBON FILM	1/6W-12K-J-26MM	R115, 122, 124, 133
R, CARBON FILM	1/6W-15K-J-26MM	R114
R, CARBON FILM	1/6W-150K-J-26MM	R303, 306
R, CARBON FILM	1/6W-18K-J-26MM	R113, 132
R, CARBON FILM	1/6W-22-J-26MM	R110, 101
R, CARBON FILM	1/6W-220-J-26MM	R427, 402, 406
R, CARBON FILM	1/6W-2.2K-J-26MM	R517, 403, 404, 119
R, CARBON FILM	1/6W-22K-J-26MM	R130, 131, 516, 128,
		C129
R, CARBON FILM	1/6W-220K-J-26MM	R513, 514, 522, 524
R, CARBON FILM	1/6W-27K-J-26MM	R206
R, CARBON FILM	1/6W-33-J-M26	R207
R, CARBON FILM	1/6W-330-J-26MM	R107, 109, 309, 502
R, CARBON FILM	1/6W-3.3K-J-26MM	R104, 126, 127, 421
R, CARBON FILM	1/6W-33K-J-26MM	R111, 117, 201
R, CARBON FILM	1/6W-390K-J-26MM	R534
R, CARBON FILM	1/6W47-J-26MM	R531
R, CARBON FILM	1/6W-470-J-26MM	R105, 532, 108
R, CARBON FILM	1/6W-4.7K-J-26MM	R125, 535, 536, 512
R, CARBON FILM	1/6W-47K-J-26MM	R116, 112, 203, 205,
		R509, 518, 519, 520,
		R521, 515
R, CARBON FILM	1/6W-470K-J-26MM	R526, 527, 525
R, CARBON FILM	1/6W-5.6K-J-26MM	R302, 305
R, CARBON FILM	1/6W-56K-J-26MM	R528, 529
R, CARBON FILM	1/6W-560K-J-26MM	R508
R, CARBON FILM	1/6W-6.8K-J-26MM	R503
R, CARBON FILM	1/6W-680K-J-26MM	R401, 405, 417, 422
R, CARBON FILM	1/6W-82-J-26MM	R425
R, CARBON FILM	1/6W-8.2K-J-26MM	R426, 419, 420
TR	DTA143TSTP/KRA2210 (110M)	Q502
TR	DTA144TSTP	Q510, 513, 514
TR	2SA933STN	Q104, 509
TR	DTC114TSTP/KRC1211 (111M)	Q101
TR	DTC143TSTP/KRC1210 (110M)	Q301, 302, 403, 404
TR	DTC144ESTP/KRC1204 (104M)	Q103
TR	KTC380Y	Q102
TR	2SA950Y	Q503
TR	2SC1740S	Q201, 401, 402, 408,
		Q405, 406, 501, 515
		Q516, 507, 505, 506,
		Q508
TR	C2120Y	Q504, 407
JACK, CAR ANT	E40026A 12×9.5-200MM	
CONNECTOR ASS'Y	FEM RCA 9P	
CONNECTOR ASS'Y	MALE 9P CHM 0902 (LONG)	

SW P.C.B ASS'Y

DESCRIPTION	SPECIFICATION	SYMBOL NO.
WIRE, COPPER	SN 5 10/10 PI0.6	
WIRE, COPPER	SN 6 10/10 PI0.6	
LCD	SLC-4129RS/C1	
LAMP, PILOT	PI3 14V 60MA PCB TYPE	
PCB, S/W	101 x 21 x 1.6T (XPC)	
S/W, TACT	JTP1230	
S/W, TACT	JTP1243	
CONNECTOR ASSY	11P 2.0MM AGM CON11	
CONNECTOR ASSY	13P 2.0MM AG M CON10	
CONNECTOR ASSY	10P 2.0MM AG M CON9	
SOLDER BAR	SN/PB = 60/40	
BAND WIRE	1㎜-WH (500M/ROL)	1PI
BOND O-KONG	#1620 (3KG/EA)	
FLUX	AM420 (18KG/L)	
DILUNT	18L/EA	
TAPE, DOUBLE SIDE	#H-7702 10M/M x 50M	
SOLDER WIRE	SN/PB = 60/40	

DECK ASS'Y

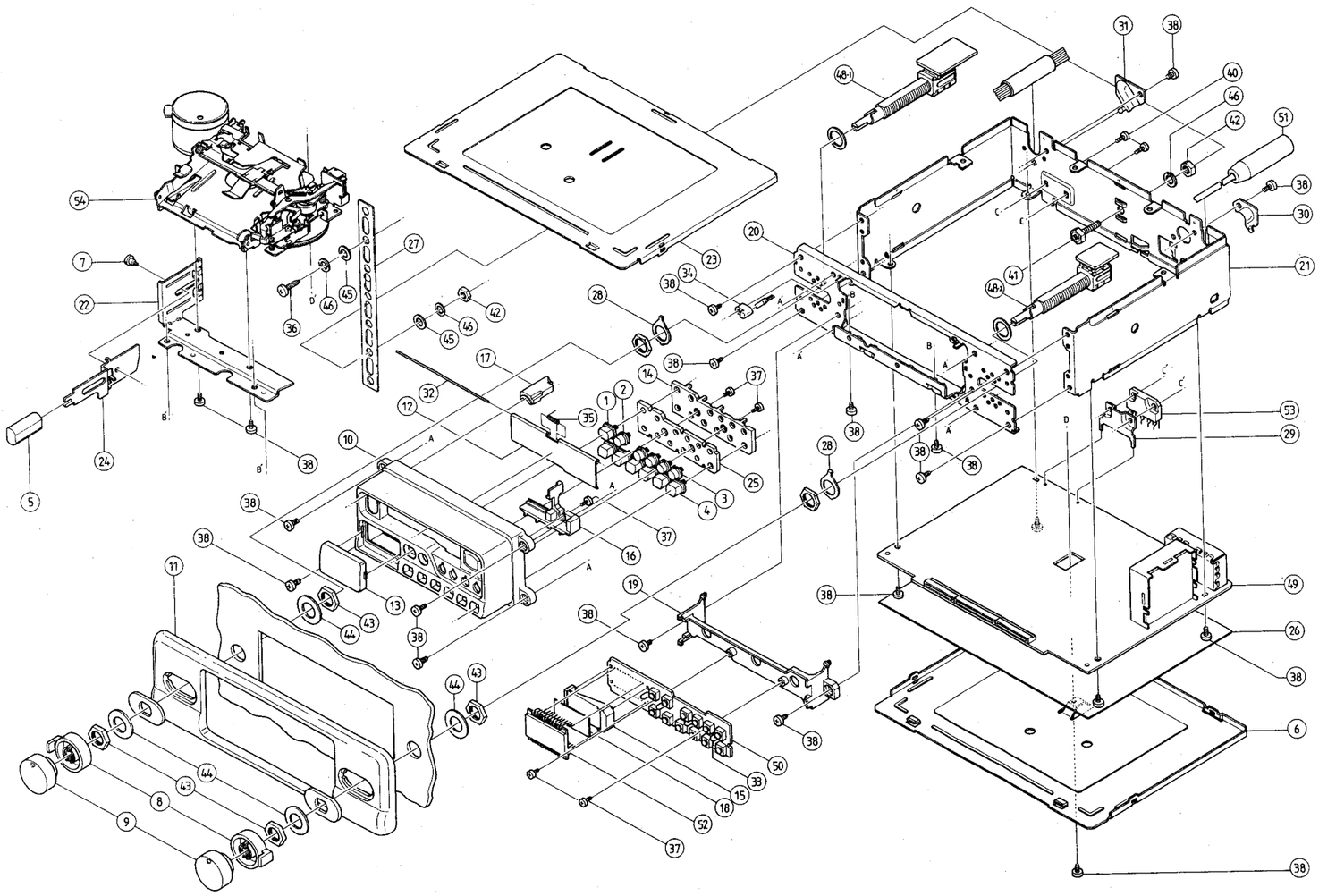
DESCRIPTION	SPECIFICATION	SYMBOL NO.
WIRE, LEAD 1007#26	OR 80 2/2	
WIRE, LEAD 1007#28	WH 50 2/2	
R, CARBON FILM	1/4W-1K-J-P	R537
CONNECTOR ASSY	4P 2.5MM ST M CON	
CONNECTOR ASSY	4P 2.5MM ST M CON8	
CONNECTOR ASSY	3P 2.5MM ST M CON7	
DECK CASSETTE	CDX36EM	
BAND WIRE	1 ㎜-WH (500M/ROL)	1PI
BOND	NOKAWA HFR 1603	
BOND, THREE	1401B (1KG/EA)	1401B
TUBE, EMPIRE	PI 1 x 1M	1PI
TUBE, EMPIRE	PI 2 x 1M (WH)	2PI
TUBE, EMPIRE	PI 3 x 1M	3PI
TUBE, EMPIRE	PI 5 x 1M	5PI
SOLDER WIRE	SN/PB = 60/40	

VR P.C.B ASS'Y

DESCRIPTION	SPECIFICATION	SYMBOL NO.
WAFER	53014-3P	
PCB, VR BAL	XPC 20 x 22 x T0.6	
C, ELECTROLYTIC	50V/0.47UF 4 x 7	C411, 412
C, POLYESTER	CQ921-50V-0.0047UF-J	C404, 408
C, POLYESTER	CQ921-50V-0.033UF-K	C406, 410, 407, 413
R, CARBON FILM	1/16W-680-J-P	R410
VR, ROTARY	V12L5DS (3B50K)	
VR FASDER T/B (L = 56)	VM12L5DGM5S	
CONNECTOR ASSY	6P 2.5MM STM CON3	
CONNECTOR ASSY	3P 2.0MM ST M CON2	
CONNECTOR ASSY	3P 2.0MM ST M CON1	
CONNECTOR ASSY	3P 2.0MM ST M CON12	
CONNECTOR ASSY	3P 2.5MM ST M CON13	
CONNECTOR ASSY	7P 2.5MM ST M CON4	
WIRE, COPPER	SN PI0.6 (2000M/ROLL)	
PCB, VR MAIN T/B	XCP, 30 x 50 x T0.6 1'ST CUT	
R, CARBON FILM	1/6W-1K-J-26MM	R409, 411
R, CARBON FILM	1/6W-10K-J-26MM	R408, 413
R, CARBON FILM	1/6W-680-J-P	R412

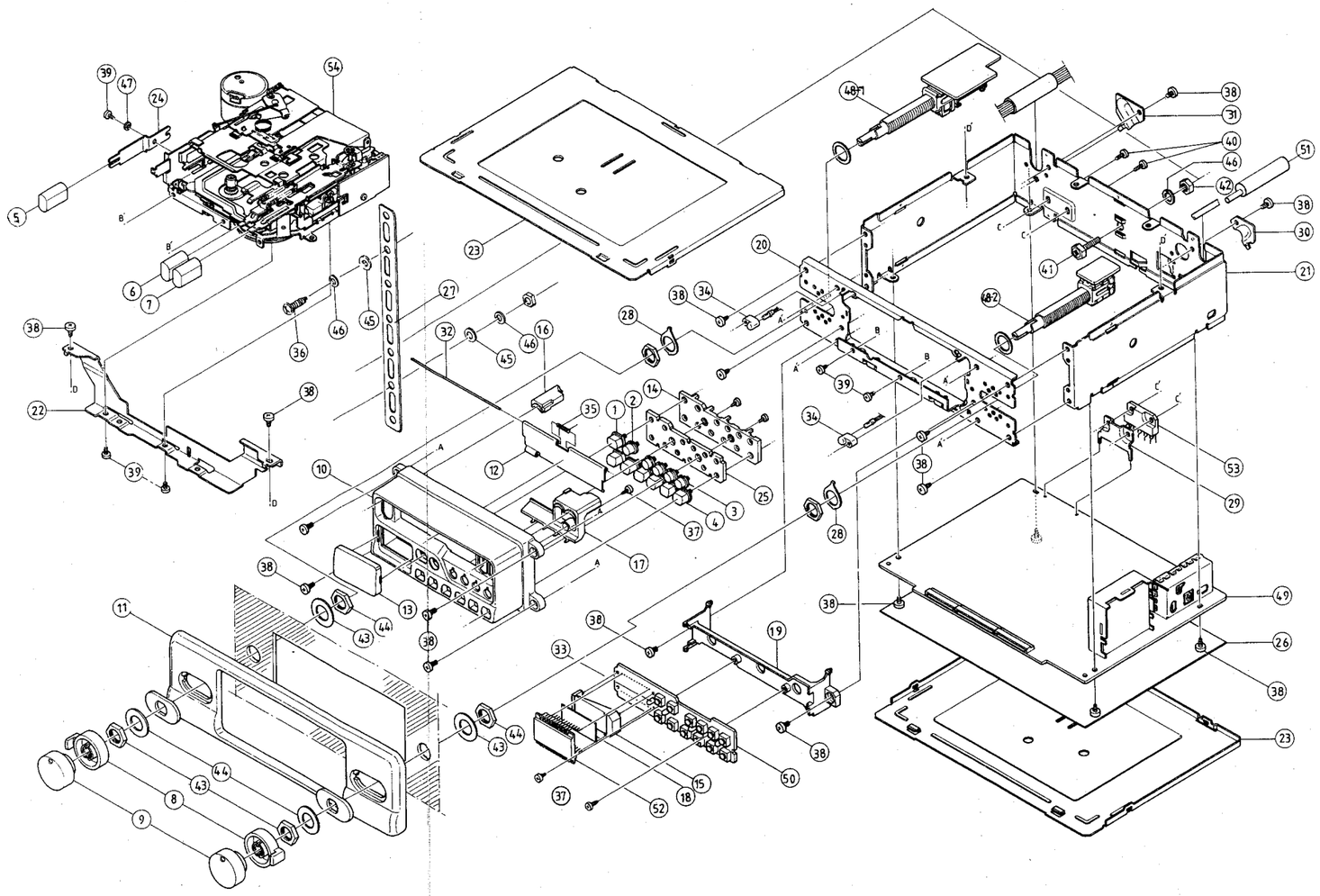
■ PART LIST GENERAL & CABINET EXPLODED VIEW (DC 318)

No.	Part No.	Description	Q'ty
1	CK8530A1	BUTTON, BAND	1
2	CK8540A1	BUTTON, SEEK	1
3	CK8550A1	BUTTON, FUNCTION	4
4	CK8560A1	BUTTON, PRESET (1)	1
	CK8570A1	BUTTON, PRESET (2)	1
	CK8580A1	BUTTON, PRESET (3)	1
	CK8590A1	BUTTON, PRESET (4)	1
	CK8600A1	BUTTON, PRESET (5)	1
	CK8610A1	BUTTON, PRESET (6)	1
5	CK8620A1	KNOB, EJECT	1
6	ED4340L1	COVER, BOTTOM	1
7	HZ1170M1	SCREW EJECT	1
8	CK8660A1	KNOB INNER	2
9	CK8670A1	KNOB OUTER	2
10	CO4220A1	NOSE PIECE	1
11	CR0520A1	TRIM PLATE	1
12	CW7540N1	DOOR TAPE	1
13	CW7560H1	WINDOW LCD	1
14	DF1610H1	REFLECTOR FUNCTION	1
15	DF1620H1	REFLECTOR LCD	1
16	DF1630H1	REFLECTOR EJECT	1
17	DF1650H1	REFLECTOR DOOR	1
18	DF1660C1	FILTER LCD	1
19	DH2740A1	HOUSING SW/PCB	1
20	EB1000L1	CHASSIS FRONT	1
21	EB1010L1	CHASSIS MAIN	1
22	EC5250L1	BRACKET DECK	1
23	ED4330L1	COVER TOP	1
24	EL0500L1	LEVER EJECT	1
25	GC3100S1	CUSHION BUTTON	1
26	GI1410X1	INSULATOR MAIN	1
27	EC0170I7	BRACKET REAR MTG.	1
28	EC1010L8	WASHER VARIABLE	2
29	EC1340L5	BRACKET IC	1
30	ES0310L0	STOPPER ANT	1
31	ES0320L5	STOPPER CORD	1
32	FS2130L3	SHAFT DOOR	1
33	GD0180R5	CAP LAMP	4
34	GH0120R4	HOLDER LAMP	1
35	GS0020L2	SPRING DOOR	1
36	HA0152P4	SCREW TAPPING PH	1
37	HB3052B3	SCREW TAPPING BH	5
38	HE6052B3	SCREW TAPTITE BH	19
39	HD6042P8	SCREW MACHINE PH	2
40	HD5052B0	SCREW MACHINE BH	2
41	HZ0620L4	SCREW MACHINE HEX	1
42	IN0520L2	NUT HEX	2
43	IZ0030Z0	NUT HEX	4
44	IZ0050Z1	WASHER PLAIN	4
45	IC0520L1	WASHER PLAIN	2
46	IE0520L2	WASHER SPRING	3
48	WP4516C1	ASS'Y MAIN-PCB	1
49	WP4518C1	ASS'Y V/R PCB	1
50	OP1130C1	PCB SWITCH	1
51	NB0040Z8	JACK ANT	1
52	OD0081C1	LCD (DISPLAY)	1
53	UP0050K5	IC POWER	1
54	WW0030C3	DECK MECHANISM	1



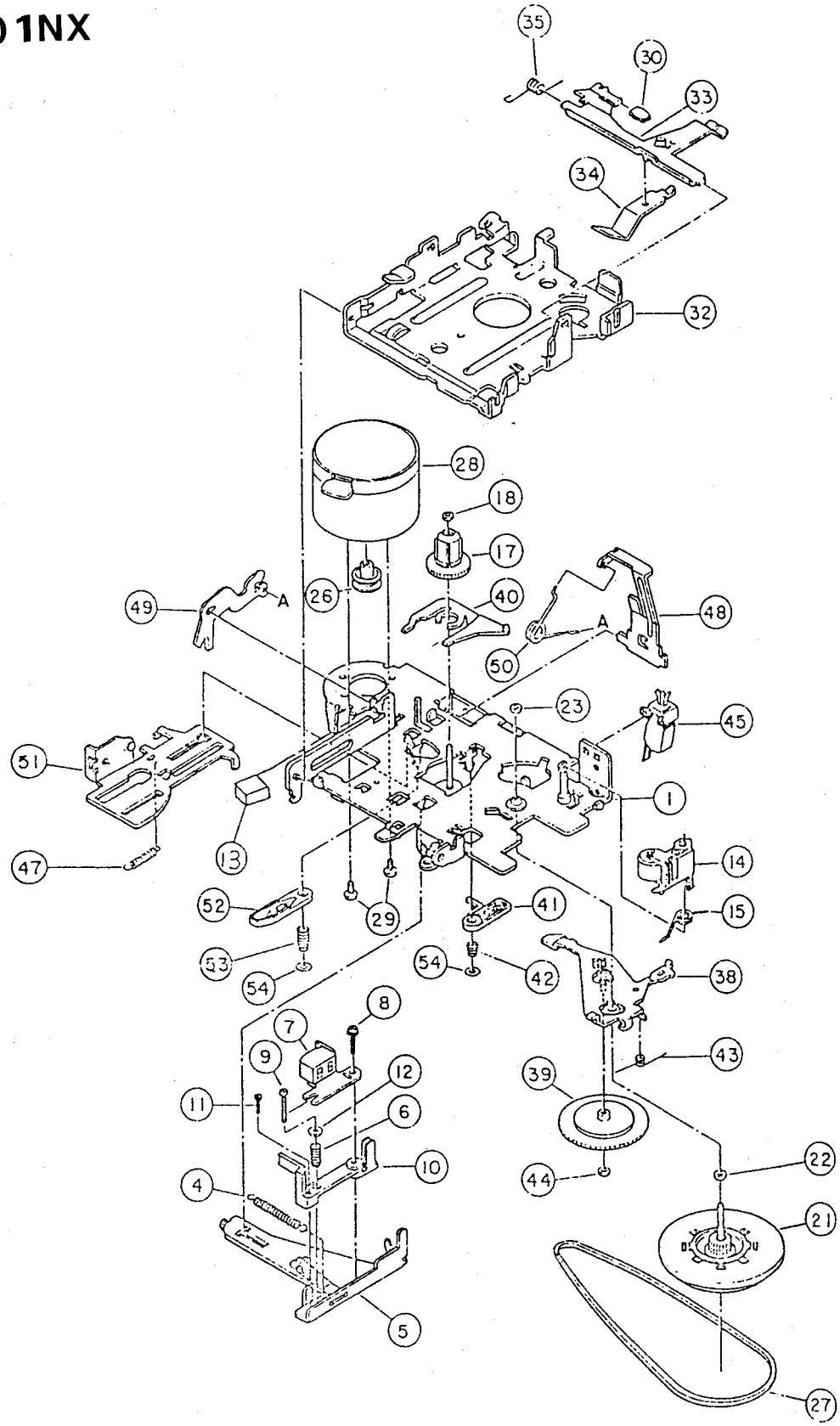
■ PART LIST GENERAL & CABINET EXPLODED VIEW (DC 418)

No.	Part No.	Description	Q'ty
1	CK8530A1	BUTTON, BAND	1
2	CK8540A1	BUTTON, SEEK	1
3	CK8550A1	BUTTON, FUNCTION	4
4	CK8560A1	BUTTON, PRESET (1)	1
	CK8570A1	BUTTON, PRESET (2)	1
	CK8580A1	BUTTON, PRESET (3)	1
	CK8590A1	BUTTON, PRESET (4)	1
	CK8600A1	BUTTON, PRESET (5)	1
	CK8610A1	BUTTON, PRESET (6)	1
5	CK8630A1	KNOB, EJECT	1
6	CK8640A1	KNOB REW	1
7	CK8650A1	KNOB FF	1
8	CK8660A1	KNOB INNER	2
9	CK8670A1	KNOB OUTER	2
10	CO4550A1	NOSE PIECE	1
11	CR0523A1	TRIM PLATE	1
12	CW7550N1	DOOR TAPE	1
13	CW7560H1	WINDOW LCD	1
14	DF1610H1	REFLECTOR FUNCTION	1
15	DF1620H1	REFLECTOR LCD	1
16	DF1630H1	REFLECTOR EJECT	1
17	DF1640H1	REFLECTOR PROGRAM	1
18	DF1660C1	FILTER LCD	1
19	DH2740A1	HOUSING SW/PCB	1
20	EB1000L1	CHASSIS FRONT	1
21	EB1010L1	CHASSIS MAIN	1
22	EC5260L1	BRACKET DECK	1
23	ED4330L1	COVER TOP	2
24	EL0540L1	LEVER EJECT	1
25	GC3100S1	CUSHION BUTTON	1
26	GI1400X1	INSULATOR MAIN	1
27	EC0170I7	BRACKET REAR MTG.	1
28	EC1010L8	WASHER VARIABLE	2
29	EC1340L5	BRACKET IC	1
30	ES0310L0	STOPPER ANT	1
31	ES0320L5	STOPPER CORD	1
32	FS2130L3	SHAFT DOOR	1
33	GD0180R5	CAP LAMP	4
34	GH0120R4	HOLDER LAMP	2
35	GS0020L2	SPRING DOOR	1
36	HA0152P4	SCREW TAPPING PH	1
37	HB3052B3	SCREW TAPPING BH	5
38	HE6052B3	SCREW TAPTITE BH	18
39	HE5042B0	SCREW TAPTITE BH	5
40	HD5052B0	SCREW MACHINE BH	2
41	HZ0620L4	SCREW MACHINE HEX	1
42	IN0520L2	NUT HEX	2
43	IZ0030Z0	NUT HEX	4
44	IZ0050Z1	WASHER PLAIN	4
45	IC0520L1	WASHER PLAIN	2
46	IE0520L2	WASHER SPRING	3
47	IE0261L7	WASHER SPRING	1
48	WP4545C1	ASS'Y MAIN-PCB	1
49	WP4544C1	ASS'Y V/R PCB	1
50	OP1130C1	PCB SWITCH	1
51	NB0040Z8	JACK ANT	1
52	OD0081C1	LCD (DISPLAY)	1
53	UP0050K5	IC POWER	1
54	WW4097C2	DECK MECHANISM	1



■ DECK EXPLODED VIEW MECHANISM (DC 318)

TN-301NX



NO.	DESCRIPTION	REFERENCE NO	Q'TY
1	CHASSIS ASS'Y (X)	1831 01 511	1
2			
3	CAMERA S TAPPING SCREW M2×3	9690 00 00	1
4	HEAD PANEL SPRING	1831 02 07	1
5	HEAD PANEL ASS'Y	1831 02 511	1
6	AZIMUTH SPRING	1831 02 03	1
7	HEAD MS15P-CAON2	6202 03 35	1
8	TAMS SCREW M2×9	9085 00 00	1
9	AZIMUTH SCREW M2×10	9999 20 37	1
10	HEAD BASE	1831 02 06	1
11	CAMERA SCREW M2×5.5	9825 00 00	1
12	WASHER 2.1×5×0.2	9316 00 00	1
13	ANTI-VIBRATION MAT	1821 12 96	1
14	PINCH ROLLER ASS'Y	1831 03 311	1
15	PINCH ROLLER SPRING	1831 03 06	1
16			
17	REEL GEAR ASS'Y	1831 04 304	1
18	P WASHER CUT 1.2×3.8×0.4	9W06 40 020	1
19			
20			
21	FLY WHEEL ASS'Y	1831 05 301	1
22	HL WASHER 2.1×3.8×0.2	9999 60 05	1
23	HL WASHER CUT 1.5×3.2×0.5	9999 70 10	1
24			
25			
26	MOTOR PULLEY	1831 06 01	1
27	MAIN BELT	1831 06 02	1
28	MOTOR EG-530AD-2F	6002 03 23	1
29	SCREW 2.6×3	9036 00 00	2
30	BRAKE SHOE	1831 07 09	1
31			
32	CASSETTE CASE	1831 07 10	1
33	KICK PLATE	1831 07 06	1
34	CASSETTE HOLD SPRING PLATE	1831 07 07	1
35	KICK PLATE SPRING	1831 07 03	1
36			
37			
38	GEAR PLATE ASS'Y	1831 08 511	1
39	CAM GEAR	1831 08 02	1
40	SENSOR	1831 08 03A	1
41	G.LOCK LEVER	1831 08 10	1
42	G.LOCK LEVER SPRING	1831 08 05	1
43	GEAR PLATE SPRING	1831 08 06	1
44	P WASHER CUT 1.2×3.8×0.35	9W02 35 010	1
45	LEAF SWITCH MCV00220SVDO	6401 01 170	1
46			
47	FUNCTION LEVER SPRING	1831 09 07	1
48	PUSH PLATE	1831 09 10	1
49	LIFT UP LEVER	1831 09 08	1
50	REVERS SPRING	1831 09 12	1
51	FUNCTION LEVER	1831 09 11	1
52	FF LOCK LEVER	1831 09 05	1
53	LOCK LEVER SPRING	1831 09 06	1
54	HL WASHER 2.1×5×0.3	9999 60 04	2
55			
56			
57			
58			
59			
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61			
62			
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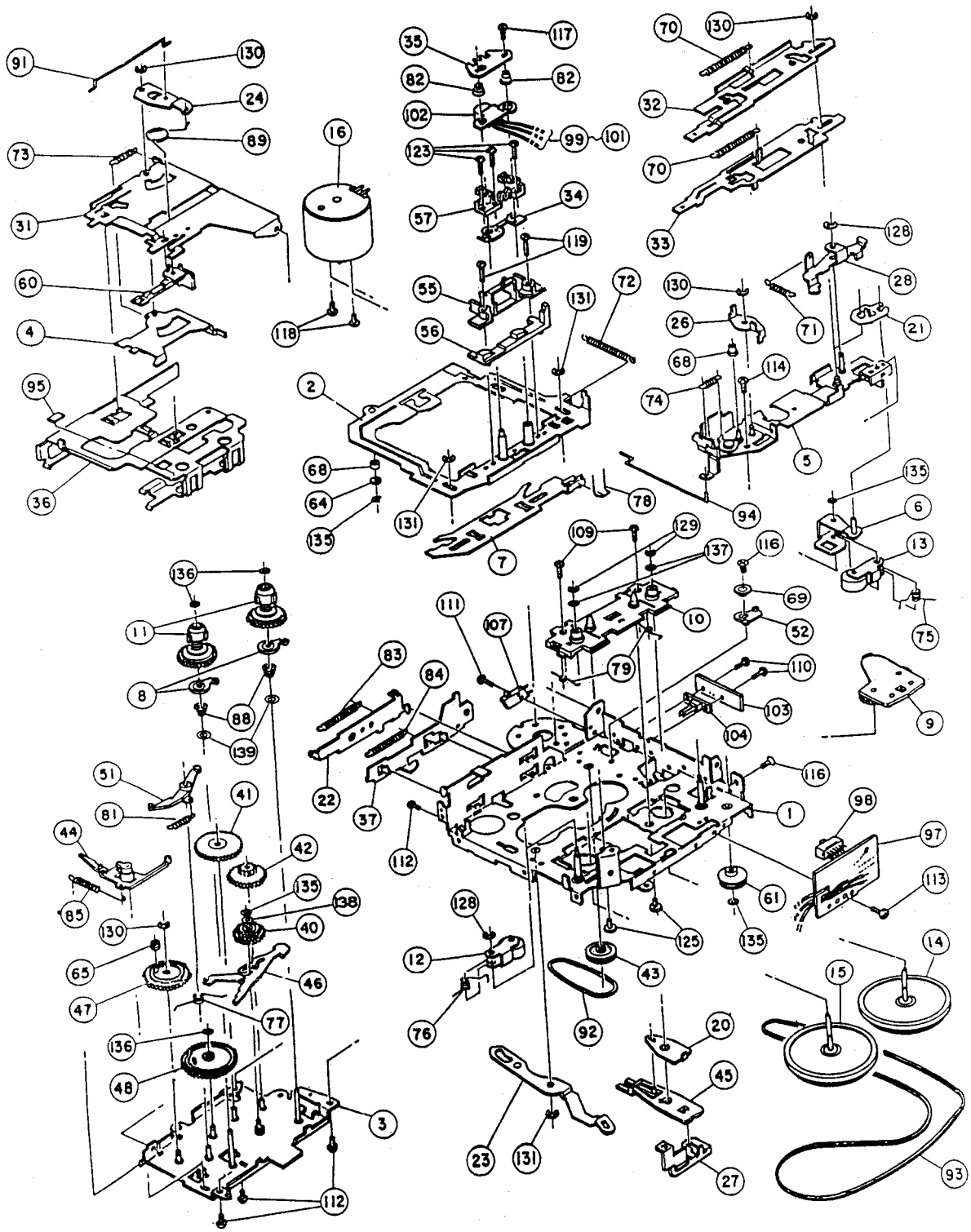
68			
69			
70			

■ DECK EXPLODED VIEW MECHANISM (DC 418)

CDX-36EM(EG)



NO.	DESCRIPTION	REFERENCE NO	Q'TY
1	MAIN CHASSIS Ass'y	3-0136-601	1
2	HEAD PLATE Ass'y	3-0138-121	1
3	REEL BASE Ass'y	3-0136-101	1
4	EJECT CAM LOCK Ass'y	3-0036-119	1
5	LEVER BRACKET Ass'y	3-0136-603	1
6	FF ARM Ass'y	3-0138-103	1
7	FR CHANGING ARM(A) Ass'y	3-0138-116	1
8	DETECTOR CAM Ass'y	3-0136-201	2
9	T.U ARM Ass'y	3-0136-202	1
10	CM BRACKET Ass'y	3-0138-206	1
11	REEL SPINDLE Ass'y	3-0136-604	2
12	PINCH ARM (R) Ass'y	1-0138-602	1
13	PINCH ARM (F) Ass'y	1-0138-603	1
14	FLY WHEEL Ass'y (F)	1-0036-601-6	1
15	FLY WHEEL Ass'y (R)	1-0036-601-8	1
16	MOTOR Ass'y	3-0138-602	1
17			
18			
19			
20	F.R ARM (A)	1-0136-102	1
21	D.F ARM	1-0136-103	1
22	EJECT LEVER	1-0036-107	1
23	REVERSE LEVER	1-0036-116	1
24	CENTER PLATE	1-0036-118	1
25			
26	CHANGE LEVER (B)	1-0036-123-5	1
27	F.R ARM (B)	1-0036-126	1
28	LOCK ARM (A)	1-0036-129	1
29			
30			
31	CASSETTE HUNGER	1-0138-102	1
32	FF LEVER	1-0138-104	1
33	REW LEVER	1-0138-105	1
34	ADJUSTER SHIM	1-0138-106	1
35	HOLD PLATE	1-0138-107	1
36	CASSETTE HOLDER	1-0138-110	1
37	EJECT CAM	1-0138-113	1
38			
39			
40	IDLE GEAR	1-0036-201	1
41	REDUCTION GEAR (B)	1-0036-203	1
42	REDUCTION GEAR (A)	1-0036-204	1
43	PULLEY GEAR	1-0036-205	1
44	RACHET	1-0036-207	1
45	FF ARM (B)	1-0136-203	1
46	SENSOR ARM	1-0036-209	1
47	SELECTOR GEAR	1-0036-210	1
48	DETECTOR GEAR	1-0036-214	1
49			
50			
51	GEAR LOCK ARM	1-0038-214	1
52	MUTE ARM (N)	1-0038-234	1
53			
54			
55	TAPE GUIDE	1-0138-203	1
56	ADJUSTER LINK	1-0138-204	1
57	ADJUSTER ARM	1-0138-205	1
58			
59			
60	TAPE HOOKER	1-0058-204	1
61	IDLE PULLEY (A)	1-0058-221-5	1
62			
63			
64	H.P. ROLLER (A)	1-0036-302	1
65	COLLAR (SELECTOR GEAR)	1-0036-318	1
66	H.P ROLLER (B)	1-0036-324	1
67			
68	PROGRAM ROLLER	1-0038-312	1
69	MUTE ARM COLLAR	1-0038-315	1
70	FF/REW LEVER SPG	1-0036-401	2
71	LOCK LEVER SPG	1-0036-402	1

NO.	DESCRIPTION	REFERENCE NO	Q'TY
72	HEAD PLATE SPG	1-0036-406	1
73	EJECT CAM LOCK SPG	1-0036-407	1
74	PROGRAM ARM SPG	1-0036-408	1
75	PINCH ARM SPG (FB)	1-0036-429	1
76	PINCH ARM SPG (RB)	1-0036-430	1
77	DASH SPG	1-0036-415	1
78	CHANGING ARM SPG	1-0036-417	1
79	EARTH SPG (R)	1-0036-418	2
80			
81	GEAR LOCK ARM SPG	1-0038-403	1
82	ADJUSTER ARM SPG (B)	1-0038-409	1
83	EJECT LEVER SPG	1-0038-412	1
84	EJECT CAM SPG	1-0038-413	1
85	RACHET SPG	1-0038-414	1
86			
87			
88	BACK TENTION SPG	1-0138-401	1
89	TAMBBLER SPG (B)	1-0058-436	1
90			
91	RETURN LINK	1-0036-506	1
92	SUB BELT (B)	1-0036-508	1
93	MAIN BELT	1-0038-510	1
94	SELECTOR LINK	1-0138-501	1
95	HOLDER CUSHION	1-0030-597	1
96			
97	SW PWB	1-0136-701	1
98	HEAD SELECT SW	1-0036-707	1
99	WIRE (A) ORANGE	1-0038-710	1
100	WIRE (A) BRACK	1-0036-702	1
101	WIRE (C) YELLOW	1-0036-704	1
102	ONE WAY PLAY HEAD	1-0036-735	1
103	MUTE PWB	1-0138-702	1
104	MUTE SW	1-0038-787	1
105			
106			
107	POWER SW	1-0058-711	1
108			
109	+MACHINE SCREW PLAIN		
	#3 S-TITE M1.7×3	2-133F-030-H2	2
110	+MACHINE SCREW PLAIN		
	#3 S-TITE M1.7×4	2-133F-040-H2	2
111	+MACHINE SCREW PLAIN		
	#3 S-TITE M1.7×6	2-133F-060-H2	1
112	+MACHINE SCREW PLAIN		
	#3 S-TITE M2×3	2-1332-030-H2	4
113	+MACHINE SCREW PLAIN		
	#3 S-TITE M2×4	2-1332-040-H2	1
114	+MACHINE SCREW PLAIN		
	#3 S-TITE M2×4	2-1332-040-H1	1
115			
116	+MACHINE SCREW FLAT		
	#1 S-TITE M2×4	2-1332-040-S2	2
117	+MACHINE SCREW PLAIN		
	#1 M2×4	2-1012-040-H2	1
118	+MACHINE SCREW PLAIN		
	#3 M2×2.5	2-1032-025-H2	2
119	+MACHINE SCREW PLAIN		
	#3 M2×7	2-1032-070-H2	2
120			
121			
122			
123	AZIMUTH SCREW P=0.25		
	M2×5	1-0138-502	3
124			
125	EJECT HOOK SCREW		
	M2×5	1-0036-505	2
126			
127			
128	E-RING ø1.5	2-171D-040-06	2
129	E-RING ø1.6×ø3.2	2-171E-032-96	2
130	E-RING ø2	2-1712-050-06	4

NO.	DESCRIPTION	REFERENCE NO	Q'TY
131	E-RING ø2.5	2-171K-060-06	3
132			
133			
134			
135	POLY WASHER W/NOTCH ø1.2×ø3×t0.25	2-1812-030-D2	4
136	POLY WASHER W/NOTCH ø1.6×ø3.2×t0.25	2-1816-032-D2	3
137	POLY WASHER ø2.1×ø3.2×t0.25	2-1821-032-D1	2
138	POLY WASHER ø 1.6×ø3.2×t0.25	2-1816-032-D1	1
139	LMW (RED) ø2.1×ø3.5×t0.05	1-0136-501	2

■ VOLTAGE CHECK POINT (DC 318)

TRANSISTOR VOLTAGE

TR NO / PIN NO	Q101	Q102	Q103	Q104	Q105	Q106	Q107	Q108	Q109	Q110	Q111	Q112	Q113	Q114
B	0	1.13	3.2	5.1	0	FM 0.3 AM 8.9	0 8.6	0.66 0	0.65	9.3	1.15	0.65	0	7.63
C	3.8	8.6	0	2.4	2.53	FM 0 AM 9.1	8.9 0.3	0 8.6	0	13.9	3.55	3.55	0	0
E	0	0.48	0	0	2.47	FM AM 9.3	9.33	0	0	9.9	0.65	0	0	0
TR NO / PIN NO	Q115	Q116	Q117	Q118	Q119	Q120	Q121	Q122						
B	0	4.98	4.98	5.7	0	0	13.56	14.13						
C	7.44	0	0	13.0	0	0	14.2	14.2						
E	0.27	0.18	0.18	5.08	0	0	12.89	13.56						

IC TERMINAL VOLTAGE

PIN NO / IC NO		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
IC 101		2.8	2.8	2.8	0	2.0	0.8	4.5	5.1	5.1	0	5.1	8.5	5.1	3.9	0.84	4.0		
IC 102		8.5	2.7	3.2	2.63	5.2	5.2	0.34	0	0	8.93	2.4	2.4	—	2.4	2.4	2.54		
IC 103		1.3	0.76	3.0	12.0	0	3.0	0.75	1.3										
IC 104	PIN NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
	VOLTAGE	1.62	1.62	1.62	1.62	1.98	1.98	5.08	2.4	0	0	—	1.2	5.08	—	2.23	2.4		
	PIN NO	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32		
	VOLTAGE	5.08	5.08	5.0	—	0	0	0	0	0.18	0.18	0	0.18	0	0.26	0	0		
	PIN NO	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48		
	VOLTAGE	—	1.62	1.62	2.53	1.62	1.62	1.62	1.62	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61		
	PIN NO	49	50	51	52														
	VOLTAGE	1.61	1.61	1.61	1.61														
IC 105	PIN NO	1	2	3	4	5	6	7	8	9	10	11	12						
	VOLTAGE	1.46	1.46	3.6	0	1.44	1.45	0	7.2	13.4	14.2	13.4	7.08						

■ VOLTAGE CHECK POINT (DC418)

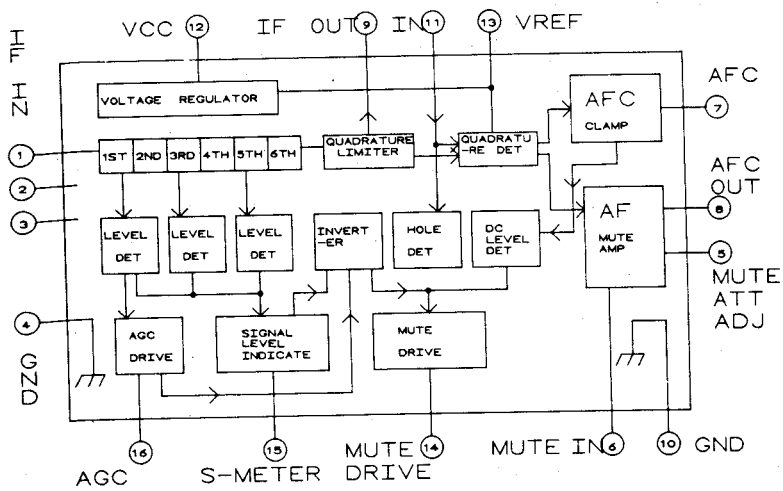
TRANSISTOR VOLTAGE

TR NO / PIN NO	Q101	Q102	Q103	Q104	Q201	Q501	Q502	Q503	Q504	Q505	Q506	Q507	Q508	Q509	Q510
B	0	1.13	3.2	5.1	0	FM 0.66 AM 0	9.4 0.7	8.8 9.0	9.3	1.15	0.65	3.3	0	7.63	0
C	3.8	8.6	0	2.4	2.53	FM 0 AM 8.9	0 9.3	9.4 0.7	13.9	3.55	3.55	2.8	0	0	7.44
E	0	0.48	0	0	2.47	FM AM 0	9.5	9.5	9.9	0.65	0	2.8	0	0	0.27
TR NO / PIN NO	Q511	Q513	Q514	Q515	Q516	Q401	Q402	Q403	Q404	Q405	Q406	Q407	Q408	Q301	Q302
B	0	4.98	4.98	5.7	0.65	1.0	1.0	0	0	0.7	0.7	13.6	14.1	0	0
C	0	0	0	13.0	0	6.4	6.4	0	0	2.4	2.4	14.2	14.2	0	0
E	0	0.18	0.18	5.08	0	0.4	0.4	0	0	0.1	0.1	12.9	13.6	0	0

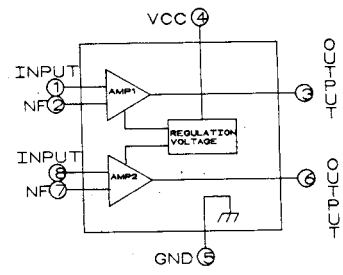
IC TERMINAL VOLTAGE

PIN NO / IC NO		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
IC 101		2.8	2.8	2.8	0	2.0	0.8	5.5	5.0	5.0	0	5.0	8.9	5.0	4.1	0.2	4.0		
IC 102		8.5	2.7	3.2	2.63	5.2	5.2	0.34	0	0	8.93	2.4	2.4	—	2.4	2.4	2.54		
IC 301		1.3	0.76	3.0	12.0	0	3.0	0.75	1.3										
IC 501	PIN NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
	VOLTAGE	1.62	1.62	1.62	1.62	1.98	1.98	5.08	2.4	0	0	—	1.2	5.08	—	2.23	2.4		
	PIN NO	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32		
	VOLTAGE	5.08	5.08	5.0	—	0	0	0	0	0.18	0.18	0	0.18	0	0.26	0	0		
	PIN NO	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48		
	VOLTAGE	—	1.62	1.62	2.53	1.62	1.62	1.62	1.62	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61		
	PIN NO	49	50	51	52														
	VOLTAGE	1.61	1.61	1.61	1.61														
IC 401	PIN NO	1	2	3	4	5	6	7	8	9	10	11	12						
	VOLTAGE	1.46	1.46	3.6	0	1.44	1.45	0	7.2	13.4	14.2	13.4	7.08						

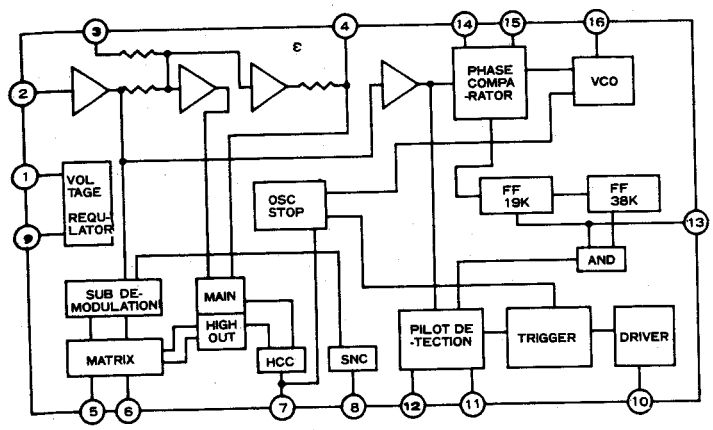
■ IC EQUIVALENT CIRCUITS (DC 318/DC 418)



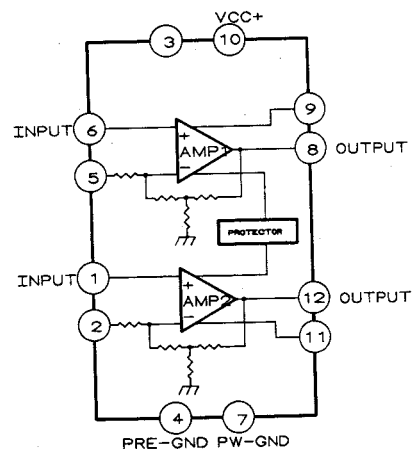
LA1140/DBL1018



LA 3161

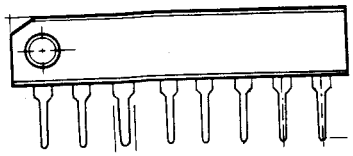


LA3370

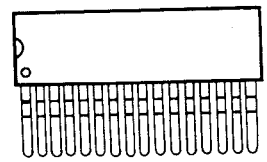


KIA6299H/KIA7299P

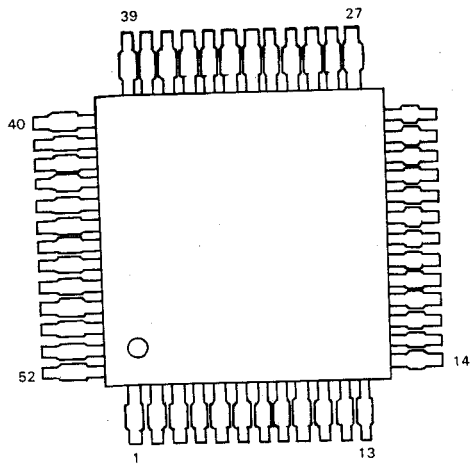
■ MULTI PIN CONNECTOR (DC 318/DC 418)



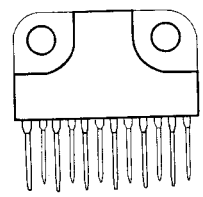
LA 3161



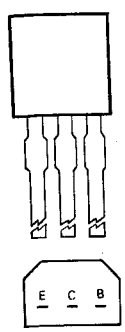
LA 3370
LA 1140
DBL 1018



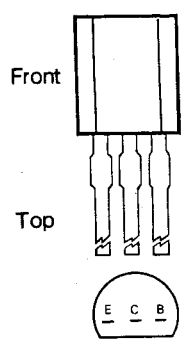
UPD 1708AG-226



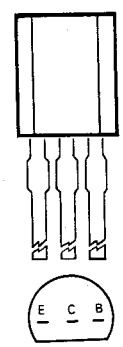
KIA6299H, KIA7299P



2SC 1740S
2SA 933S
ALL C-SERIES
ALL A-SERIES

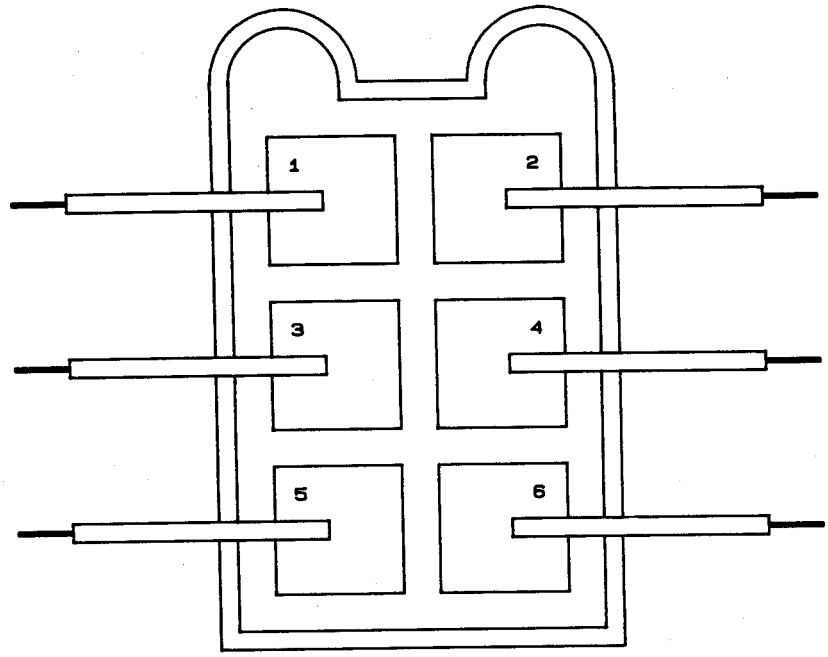


KTC 380TM
KTC 2120Y



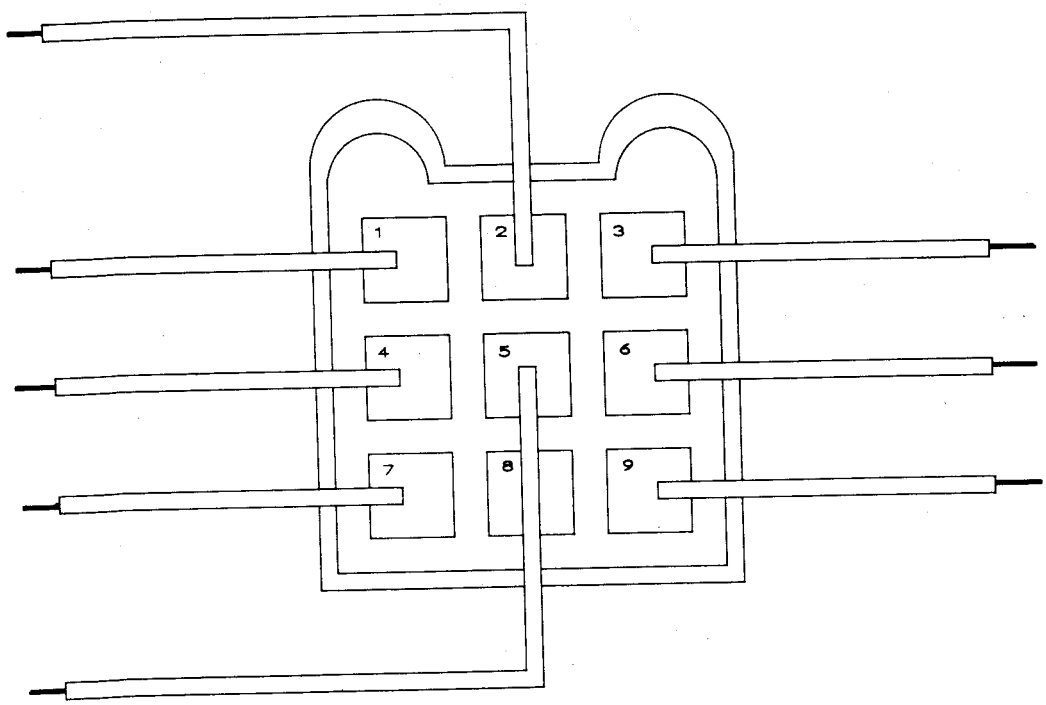
2SA 950Y

■ 6 PIN CONNECTOR MALE (DC 318)



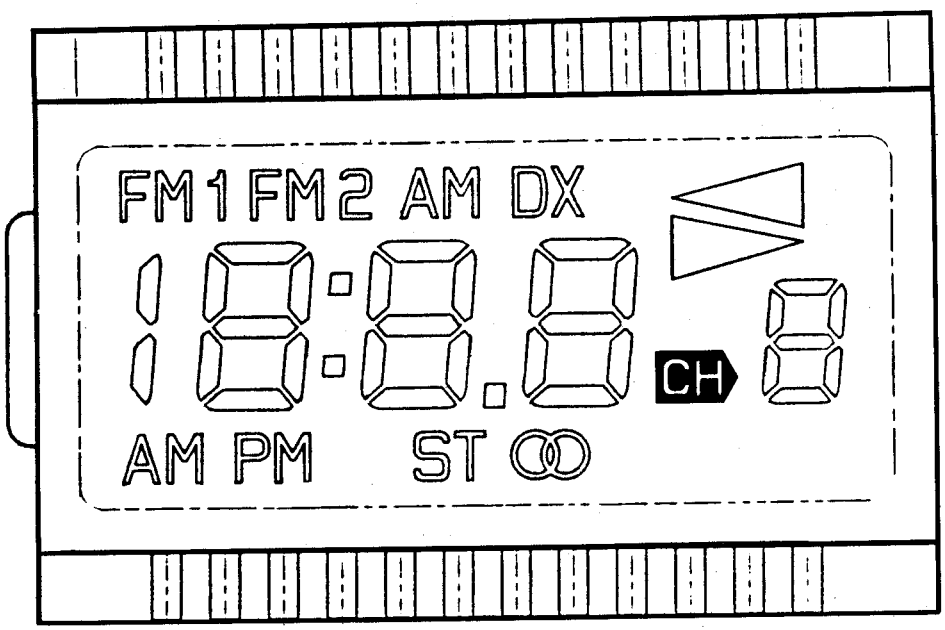
NO	COLOR	CABLE POSITION
1	RED	MAIN B+
2	BLACK	MAIN GND
3	BROWN	RIGHT SPEAKER
4	GRAY	LEFT SPEAKER
5	BLACK	SPEAKER GND
6	YELLOW	BACK UP B+

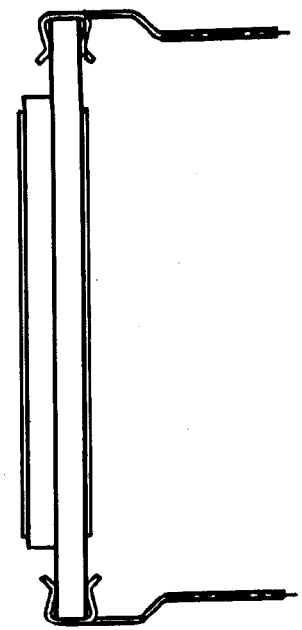
■ 9 PIN CONNECTOR MALE (DC 418)

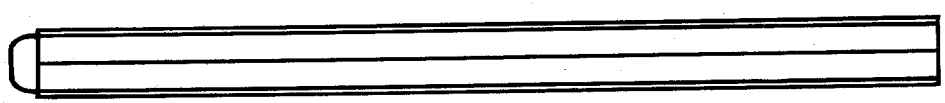


NO	COLOR	CABLE POSITION
1	RED	MAIN B+
2	BLACK	MAIN GND
3	YELLOW	BACK-UP B+
4	GREEN	REAR/R
5	VIOLET	COMMON/R
6	BLUE	REAR/L
7	BROWN	FRONT/R
8	WHITE	COMMON/L
9	GRAY	FRONT/L

■ PICTURE OF THE L.C.D







1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	FM1	FM2	PM	F1	E1	D1	A1	F2	E2	D2	A2	F3	E3	D3	A3	·		CH	D4	E4	F4	·	COM1
	AM(2)	K	AM(1)	B1	G1	C1	COL	B2	G2	C2	P	B3	G3	C3	·	DX	ST	A4	C4	G4	B4	COM2	·

NOTE

1. C-MOS: UPD 1708G-019
2. 1/2 DUTY, 1/2 BIAS
3. OPERATING VOP 5.0
4. VIEWING DIRECTION 12:00
5. OPERATING TEMP.
   −25°C TO +65°C
6. STORAGE TEMP.
   −30°C TO +80°C
7. APPLICATION F.T.R.
8. POSITIVE TYPE